

20000306.qrp v01_n752.qrl.20000306

Date: Mon, 6 Mar 2000 19:03:09 EST
From: qrp-1@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: QRP-L digest 1752

QRP-L Digest 1752

Topics covered in this issue include:

- 1) [64987] CQC Hand Keys Galore
by QRP <qrp@email.com>
- 2) [64988] Re: Dayton HamVention Help Please!
by Randy & Cara Randall <crrandal@seidata.com>
- 3) [64989] Re: Dayton HamVention Help Please!
by Tom Isgro <k8cz@concentric.net>
- 4) [64990] NORCAL: New NorCal Surface Mount Kit Announcement SMK-1
by "Doug Hendricks" <ki6ds@dospalos.org>
- 5) [64991] Fo0AAA 10 m Now
by Arthur Moe <kb7ww@chatusa.com>
- 6) [64992] standard c188 batteries
by "Michael Herman" <kc9nf@hotmail.com>
- 7) [64993] Re:%20HUGE%20garage%20sale%20-%20QRP/HF/VHF/TenTec/tuners/
powersupplies/much%20m
by JFRAKE73@aol.com
- 8) [64994] Re: Heathkit HW-7,8, & 9 Users !
by Curt Milton <wb8yyy@yahoo.com>
- 9) [64995] Re: Dayton HamVention Help Please!
by RAWSONDM@cs.com
- 10) [64996] Re:%20HUGE%20garage%20sale%20-%20QRP/HF/VHF/TenTec/tuners/
powersupplies/much%20m
by JFRAKE73@aol.com
- 11) [64997] Re: Heathkit HW-7,8, & 9 test.
by n2go@arrl.net
- 12) [64998] Fw: desolder pump
by "Walt Amos" <k8cv@worldspy.net>
- 13) [64999] Re: Dayton HamVention Help Please!
by Hank Kohl K8DD <k8dd@arrl.net>
- 14) [65000] Re: Heathkit HW-7,8, & 9 Users !
by John Raynsford <a17jk@gci.net>
- 15) [65001] 6d2x pileup at 14.015. What's the deal?
by "Michael Young" <mikey@mcs.com>
- 16) [65002] Re: Dayton HamVention Help Please!
by "Brian P. Mileschosky" <n5zgt@swcp.com>
- 17) [65003] Re: CQ HW-7, 8, 9 event?
by "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
- 18) [65004] Re: Now this is QRPpppppppppppppppp!

- by "Don Wines" <dwines@tyler.net>
- 19) [65005] ARRL Contest
by radioham@home.com
- 20) [65006] A little help please & TNX
by David Kritzberg <dkritz@mindspring.com>
- 21) [65007] Re: [Toronto] Buying gel cells
by Luke Stras <stras@ecf.toronto.edu>
- 22) [65008] HW-7 Manual Needed
by "K7FD-N7SG" <cqdx@teleport.com>
- 23) [65009] using a turner
by "Bill Allen" <bill@pcatexas.com>
- 24) [65010] Re: Fireball 40 amp problem
by "George Heron N2APB" <n2apb@erols.com>
- 25) [65011] SMK-1 Enclosure Kit offered by the NJQRP
by "George Heron N2APB" <n2apb@erols.com>
- 26) [65012] Ten Meters
by Joe Mikuckis <k3chp@erols.com>
- 27) [65013] QRP Homebrewer content overview [long]
by "George Heron N2APB" <n2apb@erols.com>
- 28) [65014] Re: using a turner
by Al Patrick <arp@inet4u.com>
- 29) [65015] HB: audio-derived S-meter
by n5ib@juno.com
- 30) [65016] ARRL DX SSB
by "Floyd Smithberg" <flydnq7x@primenet.com>
- 31) [65017] Unsubscribe errors... Re: A little help please & TNX
by "Paul R. Valko" <prvalko@oakland.edu>
- 32) [65018] sharing my excitement with the gang
by "Pete DeWolf" <kb5hrs@hotmail.com>
- 33) [65019] qrp in Vietnam
by "Scott E. Olitsky" <solitsky@acsu.buffalo.edu>
- 34) [65020] Dipole Suggestions, Tnx
by cd25d@rhapsody sails.com (Bill Slater)
- 35) [65021] Packet and digital mode books FS
by "Ken Simpson" <W8EK@fdt.net>
- 36) [65022] Re: Now this is QRPpppppppppppppppp!
by hamjoel@juno.com
- 37) [65023] Re: SMK-1 Enclosure Kit offered by the NJQRP
by "George Heron N2APB" <n2apb@erols.com>
- 38) [65024] Re: [Toronto] Buying gel cells
by Laura Halliday <va3ldh@sympatico.ca>
- 39) [65025] 160M SURPRISE
by ARDUJENSKI@aol.com
- 40) [65026] Importing the HT-750
by "Caitlyn M. Martin" <caitlyn@netferrets.net>
- 41) [65027] RE: March QST
by "Hare, Ed, W1RFI" <w1rfi@arrl.org>
- 42) [65028] WTB: PSPICE Book

by "Henry Knoll" <knoll003@tc.umn.edu>
43) [65029] Re: WTB: PSPICE Book
by "George T. Baker" <w5yr@att.net>
44) [65030] HW-# corntest & similar stuff
by Nils R Young <nilsbull@juno.com>
45) [65031] PSK31: Interfacing to FT-990's DVS-2 Interface...
by =?ISO-8859-1?Q?"KB=D8VCC"?= <kb0vcc@yahoo.com>
46) [65032] qprttf: When is it this year...
by Thomas Jennings <jennings@eng14.rochny.uspra.abb.com>
47) [65033] Re: QRP more popular than ever?
by Zack Lau <zlau@arrl.org>
48) [65034] RE: [Toronto] Buying gel cells
by Karl Kanalz <KKanalz@excel.com>
49) [65035] Atlanticon: Room to Share
by "John Humphrey" <jhumphre@ultra-tech.com>
50) [65036] Re: WTB: PSPICE Book
by bruceshaw@juno.com
51) [65037] Disposing of gel cells
by "Steven Weber" <kd1jv@moose.ncia.net>
52) [65038] Re: K2 SSB!
by Allan G Taylor <agtaylor@llnl.gov>
53) [65039] Atlanticon SNAP questions
by "Rod, N0RC" <n0rc@qsl.net>
54) [65040] OP: Miles Per Watt calculator UPDATE - Grid-Square
by "Pete (N9SSA)" <n9ssa@arrl.net>
55) [65041] QRQ Net fun.
by Ed Loranger <we6w@qsl.net>
56) [65042] Re: Toroid identification ?
by "Mike Czuhajewski" <wa8mcq@erols.com>
57) [65043] (no subject)
by KF4YYD@aol.com
58) [65044] RE: Atlanticon SNAP questions
by "Everhart, Joseph @ CSE" <jeverhar@mail.cse.1-3com.com>
59) [65045] Re: FW: (no subject) (Cutting a dipole for 40 meters)
by n2cx@voicenet.com
60) [65046] New Norcal Kit.
by Ed Loranger <we6w@qsl.net>
61) [65047] RE: Tell us about ur Binaural Receiver.
by "Hare, Ed, W1RFI" <w1rfi@arrl.org>
62) [65048] OT: Clipperton
by "Dan W. Dooley" <dandooley@pipeline.com>
63) [65049] FOX: Final log N0UR
by N0UR1@aol.com
64) [65050] Re: qprttf: When is it this year...
by Bruce Grubbs N7CEE <n7cee@arrl.net>
65) [65051] RE: Clipperton
by "Ted Roycraft" <roycraft@research.att.com>
66) [65052] Re: Interesting question - origin of Vcc

- by hattonte@gdls.com
- 67) [65053] Re: CQ HW-7, 8, 9 event?
by hattonte@gdls.com
- 68) [65054] Re: Atlanticon SNAP questions
by "E. Roswell" <eroswell@monmouth.com>
- 69) [65055] FS - OHR SCAF-1
by M Goins <mgoins@usa.net>
- 70) [65056] Re: Fireball 40 amp problem
by "Barry L. Geipel AD6HR" <bgeipel@primenet.com>
- 71) [65057] Re: Dayton HamVention Help Please!
by Tom Isgro <k8cz@concentric.net>
- 72) [65058] Re: Heathkit HW-7,8, & 9 Users !
by "Mel Evans" <mel@euramcom.freemove.co.uk>
- 73) [65059] Re: March QST
by Tom Isgro <k8cz@concentric.net>
- 74) [65060] Re: Fireball 40 amp problem
by "George Heron N2APB" <n2apb@erols.com>
- 75) [65061] New Updated list of "Hot Water Wonders" HW series users
by Rick McKee <kc8aon@juno.com>

Date: Sun, 05 Mar 2000 17:15:31 -0800
From: QRP <qrp@email.com>
To: qrp-1@Lehigh.EDU, zeekzilch@chisp.net
Subject: [64987] CQC Hand Keys Galore
Message-ID: <38C306B3.C9CE7204@email.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here are some photos from the Colorado QRP Club's annual hand key meeting on Saturday:

<http://www.cqc.org/gallery/keyday00/keyday00.htm>

WB0JNR
<http://www.rogerwendell.com>

-
--

Date: Sun, 05 Mar 2000 19:21:38 -0500
From: Randy & Cara Randall <crrandal@seidata.com>
To: n5zgt@swcp.com

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [64988] Re: Dayton HamVention Help Please!
Message-ID: <38C2FA12.A2C868C1@seidata.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

That is odd. Greater Cincinnati has the dishonor of being the 2nd highest priced airport in the US. People from Cincinnati drive to Dayton or Lexington Ky. to get a cheaper flight. Have you tried some of the internet brokers? They have a lot of restrictions, but a friend of mine saved \$500.00 a ticket on a flight from Cincinnati to Panama. He needed 4 tickets. The \$2000 he saved paid for the rest of the trip!!!

Randy.

"Brian P. Mileschosky" wrote:

> Hi All,
>
> I am planning on going to Dayton this year, but am curious to know
> what kind of ground transportation is available from either Cleveland
> or Cincinnati. I noticed it is MUCH cheaper to fly into those
> airports rather than Dayton itself.
>
> Has anybody done this before, and how did they get from either of
> those airports to Dayton and vice-versa (Bus, shuttle, etc.)?
>
> Any information ASAP would be appreciated, including contact
> information so I can arrange transportation!
>
> 72,
> Brian, N5ZGT

Date: Sun, 05 Mar 2000 19:40:46 -0500
From: Tom Isgro <k8cz@concentric.net>
To: crrandal@seidata.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [64989] Re: Dayton HamVention Help Please!
Message-ID: <38C2FE8E.B795DC6E@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I thought the same thing and then I remembered the local news reporting

that Greater Cincinnati was having an increase in pricing due to Vanguard moving out of town. It is odd he wants to fly to Cincinnati or Cleveland, I wrote him that I thought Indianapolis or Columbus were more logical choices. Can't see Dayton being that pricey though.

--

72, 73 oo's

Tom K8CZ Hamilton, OH

FPqrp #-41, QRP-1 945, FISTS 2360, NORCAL, QRP-ARCI, ARRL

Randy & Cara Randall wrote:

>

> That is odd. Greater Cincinnati has the dishonor of being the 2nd highest
> priced airport in the US. People from Cincinnati drive to Dayton or
> Lexington Ky. to get a cheaper flight. Have you tried some of the
> internet brokers? They have a lot of restrictions, but a friend of mine
> saved \$500.00 a ticket on a flight from Cincinnati to Panama. He needed 4
> tickets. The \$2000 he saved paid for the rest of the trip!!!

>

> Randy.

>

> "Brian P. Mileschosky" wrote:

>

> > Hi All,

> >

> > I am planning on going to Dayton this year, but am curious to know
> > what kind of ground transportation is available from either Cleveland
> > or Cincinnati. I noticed it is MUCH cheaper to fly into those
> > airports rather than Dayton itself.

> >

> > Has anybody done this before, and how did they get from either of
> > those airports to Dayton and vice-versa (Bus, shuttle, etc.)?

> >

> > Any information ASAP would be appreciated, including contact
> > information so I can arrange transportation!

> >

> > 72,

> > Brian, N5ZGT

Date: Sun, 5 Mar 2000 16:28:05 -0800

From: "Doug Hendricks" <ki6ds@dospalos.org>

To: <qrp-1@lehigh.edu>

Subject: [64990] NORCAL: New NorCal Surface Mount Kit Announcement SMK-1

Message-ID: <000001bf8703\$bb57ac40\$5ebdc03f@DougHendricks>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guys, I received over 200 positive responses to the announcement that NorCal was doing a full featured ten meter surface mount cw transceiver kit. Many of those mentioned that they would love to see a "training or beginner rig" before they tackled the new full featured rig which will not be available until early fall. I thought about this, talked with Dave Fifield, no he is not the mystery designer, and together we came up with a unique kit. The SMK-1. What is it?

Well, it is basically the TT2/MRX with Mods circuit that is on Dave's webpage, www.redhotradio.com but we had to make some changes. First of all, the LM380 is not available in surface mount, so Dave switched it for an LM386. What he ended up with is a neat little surface mount project. It is a transceiver, with separate VXO tuning for transmit and receive. That means you have instant RIT and XIT!! Plus, it uses diode switching, and has a real sidetone!! Neat huh? The transmitter tunes about 1 to 1.5 kHz, and the receiver about 4 to 5 kHz. and they overlap, so true transceiver operation is possible. No thump, but a slight bit of chirp, nothing that is horrible, just there. No microphonics. We use the MRX receiver circuit with a couple of mods, and it works pretty good. The prototype has an mds of about -117dB, which is fine on 40 meters.

The exciting thing is the rig is all surfacemount parts except for the 2 crystals (7.040), two trim caps, and the 3 control pots. We use 1206 parts, the "big ones". 1206 means that they are .12 x .06 inches in size. There are 85 parts in the kit, a professional quality, double sided, soldermasked, silkscreened board, and we supply all board mounted parts including the 3 control pots. You will need to come up with the audio jack, key jack, power jack and antenna jack of your choice. The 3 control pots are mounted across the front of the board, and are used to connect it to the front panel. The pads for the audio, key, power and antenna connectors are on .1" centers so you can use molex connectors if you wish (not supplied). We are not supplying a case, but, our good friends at the NJ QRP Club are doing a specially designed case kit that comes with the connectors, knobs and feet. George Heron will be posting the details soon, including where to see a picture of the case.

I have saved the best for last. The size of the board is 2.5" wide by 2.25" deep!! Pictures of the board and prototype kit are on the www.redhotradio.com site. Please click on the SMK-1 button to view.

The cost? \$30 + \$4 shipping and handling. We are taking orders now. You need to do two things.

First, mail a check made out to Jim Cates for \$34 and asking for the SMK-1.

Send the check to:

Jim Cates
3241 Eastwood Rd.
Sacramento, CA 95821

Please include a self addressed mailing label. It can be simply your name and address typed on white paper.

Second, send me an email that you have ordered the kit, that gives me a working list of how many parts to order. Please put SMK-1 in the subject line of the message.

This is a very usable transceiver. It is not a NorCal 40 or NorCal 20, but it is better than the 49er. The prototype puts out 360mW, and Dave made the first qso last night with Ed Loranger, WE6W. It was not staged or set up. Dave called CQ, Ed answered and they had a nice long qso. This rig is designed to introduce you to working with surface mount parts. It has over 70 surface mount parts. We think that the average builder will not have a problem with it. We did this to start training qrp homebrewers in SM construction. We also wanted to do a simpler kit that would be very easy to build, provide training, easy to trouble shoot, and also give me experience kitting before the full featured rig comes out. Parts will be ordered this week, and I anticipate shipping to begin in less than a month!! I have some unique ideas on how to package the parts so that they are easily identifiable yet reasonable to kit. Should be fun learning together.

Thanks for all the interest and encouragement, it helps a bunch. 72, Doug,
KI6DS

Date: Sun, 05 Mar 2000 16:54:17 -0800
From: Arthur Moe <kb7ww@chatusa.com>
To: qrp <qrp-1@lehigh.edu>
Subject: [64991] Fo0AAA 10 m Now
Message-ID: <38C301B8.75960E74@chatusa.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

28.025 listening up, got him second call

Art
KB7WW

Date: Sun, 05 Mar 2000 17:37:47 PST
From: "Michael Herman" <kc9nf@hotmail.com>
To: qrp-1@Lehigh.EDU, tentec@contesting.com
Subject: [64992] standard c188 batteries
Message-ID: <20000306013747.13512.qmail@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

does anyone know a source of cnb 182 or cnb184 for a Standard c188

Mike KC9nf

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Sun, 5 Mar 2000 20:53:32 EST
From: JFRAKE73@aol.com
To: qrp-1@lehigh.edu
Subject: [64993] Re:%20HUGE%20garage%20sale%20-%20QRP/HF/VHF/TenTec/tuners/
powersupplies/much%20m
Message-ID: <7a.25393b7.25f4699c@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Scott: Interested in your HW- 9. Sold? Jack, W1IU

Date: Sun, 5 Mar 2000 18:00:15 -0800 (PST)
From: Curt Milton <wb8yyy@yahoo.com>
To: kc8aon@juno.com, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [64994] Re: Heathkit HW-7,8, & 9 Users !
Message-ID: <20000306020015.4218.qmail@web2004.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Just a suggestion - to have a real QRP party, it might be good to invite the whole QRP community - just make the rig type part of the exchange and reward extra points for working a hw-7, 8 or 9 and have a user category for each rig type. make it as fun and inclusive as possible - but if you wish to throw this suggestion out the window no problem!

curt wb8yyy (sometimes hw-8, 38s, ugly weekender op)

--- Rick McKee <kc8aon@juno.com> wrote:

> Good to see that there are a few still on the air !
> Here are the ones
> listed in the order that I recieved them. Also,
> Carel, PA0CMU in
> Holland, along with 4 or 5 other hams have
> reproduced the HW-8 circuit
> and homebrewed their rigs ! And would someone
> please tell Steve, AA5TB
> where his long lost, sold at a sidewalk sale HW-8 is
> ! It has his old
> call inscribed on the inside of the top cover -
> KA5DUU, shame shame Steve
> - only kidding.
>
> 1 Howard, K2UD - HW-7, 8, & 9
> 2 Rick, KC8AON - HW-7 & 8
> 3 Joe, KK5NA - HW-7, 8, & 9
> 4 Nick, K3NY - HW-8
> 5 Donald, W4BWS - HW-8
> 6 Martin, N1PGP - HW-8
> 7 Scott, W4PJ - HW-8
> 8 Tom, WB5QYT - HW-8
> 9 Brian, WD0HGB - HW-7
> 10 Jim, N5IB - HW-7
> 11 Jerry, W8GND - HW-8
> 12 Pablo, WP4JXD - HW-8
> 13 Walt, N9MZP - HW-9
> 14 Thomas, AC7A - HW-8
> 15 Thaire, W2APF - HW-7 & 8
> 16 Don, KK7VM - HW-8
> 17 Robert, KC2JZ - HW-8
>
>

> YOU'RE PAYING TOO MUCH FOR THE INTERNET!
> Juno now offers FREE Internet Access!
> Try it today - there's no risk! For your FREE
> software, visit:
> <http://dl.www.juno.com/get/tagj>.
>

Do You Yahoo!?
Talk to your friends online with Yahoo! Messenger.

<http://im.yahoo.com>

Date: Sun, 5 Mar 2000 21:01:51 EST
From: RAWSONDM@cs.com
To: crrandal@seidata.com, qrp-1@lehigh.edu
Subject: [64995] Re: Dayton HamVention Help Please!
Message-ID: <86.140c942.25f46b8f@cs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

No, he's right. When my family flys it is generally cheaper to fly into or out of Columbus or Cincinnati. I haven't flown from Dayton in a couple of years. I live 1 mile from the Dayton airport. Panama may be a different situation.

Dave KB8RRG

Date: Sun, 5 Mar 2000 21:07:03 EST
From: JFRAKE73@aol.com
To: qrp-1@lehigh.edu
Subject: [64996] Re:%20HUGE%20garage%20sale%20-%20QRP/HF/VHF/TenTec/tuners/powersupplies/much%20m
Message-ID: <35.22b94c3.25f46cc7@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

ham@w3eax.umd.edu .Scott, n7ji. I am interested in your HW-9. Sold?
Jack, W1IU jfrake73@aol.com

Date: Sun, 5 Mar 2000 21:13:21 -0500 (EST)
From: n2go@arrl.net
To: Curt Milton <wb8yyy@yahoo.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [64997] Re: Heathkit HW-7,8, & 9 test.
Message-ID:
<Pine.LNX.4.20.0003052109460.3833-1000000@valhalla.valhalla.buffalo.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

how about the following point structure:

5 points for contact with or from a hw-7
3 points " " " " " " hw-8
2 points " " " " " " hw-9
1 point for all other contacts

If you ever used a hw-7; you would find this fair :)
In fact it should be 10 points for the hw-7 :))

73,

Jim n2go

Date: Sun, 5 Mar 2000 23:53:22 -0000
From: "Walt Amos" <k8cv@worldspy.net>
To: "Qrp-1 Posts" <qrp-1@lehigh.edu>
Subject: [64998] Fw: desolder pump
Message-ID: <000201bf8713\$bd065360\$ebbb86520@waltk8cv>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hummmmmmmmm, there was one in the solder kit from fair radio along with a bunch of tips and de solder stuff but I will have to buy a 700 F fine conical tip and probably a 800 F one also as the included one is only 600 F. Lots of various size tips with holes in them for the solder sucker though.

Am I ready for the new NORCAL surface mount kit ? Well, no, my eyes sure aren't, but I do have a magnifying lamp with a fluorescent circular bulb and a ESD ground mat and wrist strap. Let the PAIN begin ;-))

Walt K8CV Royal Oak, Michigan " May the SOC be with you! "

----- Original Message -----
From: "Dave Pomeroy" <dave_pomeroy@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Friday, March 03, 2000 16:05
Subject: desolder pump

> Gang & Phil,

> Here is the URL for the heated desolder pump.
> <http://www.action-electronics.com/desolder.htm>
>
>
> =====
> Dave Pomeroy K8DNP Southwest Michigan
> -----
> Do You Yahoo!?
> Talk to your friends online with Yahoo! Messenger.
> <http://im.yahoo.com>
>

Date: Sun, 05 Mar 2000 21:43:01 -0500
From: Hank Kohl K8DD <k8dd@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [64999] Re: Dayton HamVention Help Please!
Message-ID: <4.1.20000305213610.00b9aec0@192.0.0.6>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>From the latest Dayton Hamvention flyer

Airline Service to Dayton.

It is recommended that reservations be made 60 days in advance. The following airlines service out area. Discounts are available. For more information, please see our web site at www.hamvention.org

Airline	File #
American Airlines	305 OUE
1 800 433 1790	
Continental	I1N9B1
1 800 468 7022	
Delta	134980A
1 800 241 6760	
Trans World Airlines	V16003
1 800 325 4933	
US Air	82681231
1 877 874 7687	

No idea how much of a discount you get or how it works.

Nor do I have any affiliation with any of the airlines, Hamvention, etc, etc, etc.

Also....The QRP-ARCI block of rooms at the Ramada Inn are filled and there are about 17 on the standby list. We are going to try to get

some more rooms to at least fill the standby list. www.qrparci.org and follow the FDIM links to the rooms.

73 Hank K8DD

*/ Hank Kohl K8DD k8dd@arrl.net
*/ ARRL TS <http://www.tir.com/~k8dd>
*/ MI-QRP - Vice Pres. QRP-ARCI - Director
*/
*/ Did you know you can email money with PayPal.com?
*/ Check this out:
*/ <https://secure.paypal.com/refer/pal=k8dd%40arrl.net>

Date: Sun, 05 Mar 2000 18:03:03 -0900
From: John Raynsford <al7jk@gci.net>
To: qrp Discussion <qrp-l@Lehigh.EDU>
Subject: [65000] Re: Heathkit HW-7,8, & 9 Users !
Message-ID: <38C31FE6.AE91EB57@gci.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Rick McKee wrote:

> Good to see that there are a few still on the air ! Here are the ones
> listed in the order that I recieved them.

Would like to participate in the Heathkit event ...

HW-9

AL7JK, John
Eagle River, Alaska

Date: Sun, 5 Mar 2000 21:14:36 -0600
From: "Michael Young" <mikey@mcs.com>
To: "qrp-l" <qrp-l@Lehigh.EDU>
Subject: [65001] 6d2x pileup at 14.015. What's the deal?

Message-ID: <00a201bf871a\$1a4d5b80\$7004a2c6@fensoft.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

What's the deal with the big pileup for Mexico? He's running them about 4 a minute. (03:10z on 14015.25). Or did I just miss the importance of his call??? Anyway, 20m is wide open this evening. Looks great for some S. Pacific early in the morning. :-)

Michael.
K9ZC

Date: Sun, 5 Mar 2000 20:18:50 -0700
From: "Brian P. Mileschosky" <n5zgt@swcp.com>
To: <k8dd@arrl.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [65002] Re: Dayton HamVention Help Please!
Message-ID: <008c01bf871a\$b2e7d320\$4d0586cc@hlw11>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,

Thanks for the info...I'm reserving tickets soon, but I FIRST would like to see what my choices are as far as ground transportation to Dayton from the airport. I'm not over 25 yet, so renting a car will be tough.

So would anybody be able to recommend a bus service or shuttle of some kind that runs back and forth between either Cincinnati, or Columbus (in my previous email I accidentally mentioned Cleveland...it was a typo) and Dayton? Any help would be appreciated.

As soon as getting to and from the airport to Dayton is taken care of, I'll go ahead and reserve my airline tickets to either of those particular airports.

Again, and help would be appreciated. Thanks!

72,
Brian, N5ZGT

Albuquerque, NM
<http://www.unm.edu/~brianm>

----- Original Message -----

From: Hank Kohl K8DD <k8dd@arrl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Sunday, March 05, 2000 7:43 PM
Subject: Re: Dayton HamVention Help Please!

> >>From the latest Dayton Hamvention flyer
>
> Airline Service to Dayton.
> It is recommended that reservations be made 60 days in advance. The
> following airlines service out area. Discounts are available. For
> more information, please see our web site at www.hamvention.org
>
> Airline File #
> American Airlines 305 OUE
> 1 800 433 1790
> Continental I1N9B1
> 1 800 468 7022
> Delta 134980A
> 1 800 241 6760
> Trans World Airlines V16003
> 1 800 325 4933
> US Air 82681231
> 1 877 874 7687
>
> No idea how much of a discount you get or how it works.
> Nor do I have any affiliation with any of the airlines, Hamvention,
> etc, etc, etc.
>
> Also....The QRP-ARCI block of rooms at the Ramada Inn are filled and
> there are about 17 on the standby list. We are going to try to get
> some more rooms to at least fill the standby list. www.qrparci.org and
> follow the FDIM links to the rooms.
>
> 73 Hank K8DD
>
>
> */ Hank Kohl K8DD k8dd@arrl.net
> */ ARRL TS <http://www.tir.com/~k8dd>
> */ MI-QRP - Vice Pres. QRP-ARCI - Director
> */
> */ Did you know you can email money with PayPal.com?
> */ Check this out:
> */ <https://secure.paypal.com/refer/pal=k8dd%40arrl.net>

>
>

Date: Sun, 05 Mar 2000 22:30:25 -0500
From: "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
To: kc8aon@juno.com, "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [65003] Re: CQ HW-7, 8, 9 event?
Message-ID: <38C32651.944EF807@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have and use all three...HW-7, HW-8, HW-9. My HW-9 is my primary field ops rig. The HW-7 and HW-8 I have placed into semi-retirement but have been know to fire them up periodically.

--

+++++

T.J. "SKIP" AREY N2EI e-mail tjarey@home.com

Website <http://members.home.net/tjarey>

Snail Mail: PO Box 236, Beverly, NJ 08010

Specialization is for insects! LAZARUS LONG

Date: Sun, 5 Mar 2000 21:56:37 -0600
From: "Don Wines" <dwines@tyler.net>
To: "QRP-L LIST" <qrp-1@lehigh.edu>
Subject: [65004] Re: Now this is QRPppppppppppppppp!
Message-ID: <00a201bf871f\$f9f85280\$1f9086d0@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Chuck wrote:

>
> Don,
>
> But it was done with 8w, which isn't QRP.... :-)
>

>
> Chuck Adams K7Q0 K7Q0@primenet.com <http://www.qsl.net/k7qo/>
>

8 watts, 5 watts, whatever! From 6.8 billion miles out I'm willin' to cut 'em a little slack!! ;^)

72/73
Don, K5DW
QRP-L #2083
k5dw@arrl.net

Date: Sun, 05 Mar 2000 23:09:58 -0500
From: radioham@home.com
To: qrp-l@Lehigh.EDU
Subject: [65005] ARRL Contest
Message-ID: <3.0.6.32.20000305230958.007b4e60@24.2.2.70>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

With limited time, it was still a lot of fun this afternoon. Made it a total 10 meter effort. Started out with my AEA DX Handy with whip in the backyard. It's a whole lot easier when everyone is straining to hear you. I think the last few hours of a contest are the best for QRPers, as folks are getting desperate. Anyway, worked several unbelievable distances with this 1 watt handheld, but... you know how you start to talk very loudly when you are trying to squeeze out the last drop of mws of power?? Welllll - when you do it outdoors, the neighbors start looking at you funny - real funny when you yell your call over and over. I started to feel like Nils. I heard a siren and wondered if they were coming to take me away :-).

Moved indoors to the TT 509 - forgot how close the tuning is on 10 as the band is not split up into 4 segments. Gave up and switched to the FT-840 at 5 watts. Got American Samoa, Japan, Australia - 5 watts to a long wire.

Boy, were they ever looking hard for contacts. Some prefixes I have yet to look up and have no idea where they are.

Maybe I'll go all out one day for a contest, but I think it's a lot more inteersting when you are just in it for fun.

72/73,

Steve, N4EUK
Reston, VA

Date: Sun, 05 Mar 2000 22:53:49 +0000
From: David Kritzberg <dkritz@mindspring.com>
To: qrp-1@Lehigh.EDU
Subject: [65006] A little help please & TNX
Message-ID: <38C2E57E.4EC2@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello,

can someone give me a tutorial on unsubscribing to the list?
I don't get to check my email but once per week & it takes way too long
to sift through all the posts. I've tried to send a command & must be
fouling it up somehow.

Thanks in advance fer any help & 73
Dave KF4UOD

Date: Sun, 5 Mar 2000 23:56:30 -0500
From: Luke Stras <stras@ecf.toronto.edu>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [65007] Re: [Toronto] Buying gel cells
Message-ID: <20000305235630.A10472@eyetap.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

On Sat, Mar 04, 2000 at 11:20:58AM -0500, Vincent Ferme wrote:
> Big mistake, Laura. :)) How is the gorilla at the door doing? They have a
> stuffed gorilla costume that scare the heck out of people. The only time my wife
> was there she almost had a heart attack.

Heh. The gorilla's still there, and still makes me jump out of my skin
every time I go throught the door.

> Are the batteries ok? Are they charging and keeping the charge? I go there
> regularly and saw the batteries. Who knows how long they have been sitting
> unused before arriving there. Some of them are new old stock.

DO NOT BUY BATTERIES FROM ACTIVE! I have had *terrible* luck with their
batteries -- in particular, with charge retention. If you take a DVM
with you, you'll find that many of the batteries are below 1.7 V/cell,
i.e., totally kaput.

Active's got a lot of great junk (that box-o'-glassfets should be great fun for anyone who's into hollow state), but there's a reason we call them the Ferrengi store: once they have your money, they never, ever, give it back.

VA3LNS

Date: Sun, 5 Mar 2000 20:45:28 -0800
From: "K7FD-N7SG" <cqdx@teleport.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [65008] HW-7 Manual Needed
Message-ID: <006101bf8726\$cd73f960\$8f231ad8@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello,

I am posting this for my friend, VA7SS:

Need manual for HW-7.

Please email him at: efisher@uniserve.com

Thanks

John K7FD

Date: Sun, 5 Mar 2000 22:39:45 -0600
From: "Bill Allen" <bill@pcatexas.com>
To: <qrp-1@Lehigh.EDU>
Subject: [65009] using a turner
Message-ID: <004e01bf8726\$008e5c60\$9dbac1d0@ourtown.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Gang!

I have gotten my hands on a second hand tuner - a MFJ Versa Tuner II. Does anyone have experience with this tuner? Would someone describe its use?

thx
KC5ADF
Bill Allen

Date: Sun, 5 Mar 2000 22:04:05 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: <john@neknetwork.com>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [65010] Re: Fireball 40 amp problem
Message-ID: <005b01bf8718\$a77fd200\$59ee7ad1@ire.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi John -

Even with a voltmeter, you'll find that you are pretty well equipped for diagnostic work on your RF circuits. You should check out the ARRL Handbook (or elsewhere) for an "RF Probe" that will allow you to read RF voltages on your simple voltmeter. Just one diode, a couple of caps and a resistor is all you need on the end of your probes and you'll be in business.

Okay, now let's get down to business. Another QRPers recently had a similar question about the (non)operational characteristic of his FB40 Amp, so I'll adapt some of that posting and tune it for you.

There's not too much information to go on, so let's start with some basics.

You might want to see if you have any RF signal coming from the low-level RF output of the FB40. That is, at the output of the first low pass filter, see if you have any voltage (using your RF Probe. Most people have about 15mW or so, which corresponds to a reading of about 800mV on your DVM (and RF probe).

$$P_{out} = (V_{rms})^2 / 47$$

For the sake of discussion, I'll assume you have some signal. The driver stage (oscillator can, divider flip flops and LPF) are pretty simple and you shouldn't have any trouble with them. Let us know if you do NOT have any output signal from this "driving" stage. If there's nothing there, you

certainly won't have anything coming out of the 13dB amplifier stage.

The next thing to do is to absolutely ensure that your Q3 driver stage is being "powered up" by the KEY line and switch circuit Q2. Ground the KEY pad coming off U1 pin 7, which should keep the driver on all the time. It's okay to do this, and it's okay to ground the Q1 collector (if you have the TiCK option installed).

What we'll next do is check that the driver power switch Q2 is turning on properly. If it's not, you won't have any power to the driver and you will indeed get small RF voltages where you were probing. I suspect this might be the problem.

With your straight DMM voltage probe (ie., not the RF probe this time), measure the collector of Q2 and see if you have something very close to your V+ voltage. If you are supplying 12V to the board, you should have something like 11.3 volts on the collector. (And be careful to observe that it's not just floating around at some high value because of your finger touching the probe or circuit. If Q2 is not on, that point will tend to float and may give deceptive readings.)

IF Q2 IS NOT ON ... there's your problem. Check the components in the Q2 biasing area: Q2 pins for proper orientation (e-b-c), that resistors are all in place, and especially ensure that zener diode D4 is inserted correctly (the cathode or banded end of the diode should be on the C8/R4 junction.)

If things still look okay, temporarily ground that C8/R4 junction. That should force Q2 on. If still no voltage being supplied to the top of R12, there's likely still a component error and/or a bad transistor. (Let me know if you think you have a bad component and we'll replace it immediately for you.)

If you can't get past this point, you can force V+ to the Q3 driver stage by jumpering V+ over to the top of R12. And even keeping it this way is okay long term - you will just have a higher current draw from your power supply (or battery) when you're not keying.

Okay, now I'm assuming you have voltage being supplied to the top of the driver stage ... either by fixing the Q2 switch or by jumpering V+ over to the top of R12.

Let us know what you now see at the top of T2 (end labeled 1), and at the 1.5W output out of the board. I would expect that you will see something like 8.6Vrms for the proper 1.5W out.

Good luck!

73, George N2APB

PS: For those inquisitive souls following along, there is a FABULOUS reference that everyone should have on their bench and read: Solid State design for the Radio Amateur, published by the ARRL , written by Wes Hayward and Doug DeMaw, third printing 1995, \$15. Chapters 1 and 2 are absolutely essential for understanding the basics of transistor biasing and amplifier design. This is the *best* reference I have ever come across and it's even more valuable because it takes real examples and works through the math. You'll love it, trust me!

----- Original Message -----

I finished building the add-on amp for the Fireball 40, but it doesn't seem to be putting out much. I have basically nothing for test equipment besides a volt meter.

John, KB1ENS

Date: Sun, 5 Mar 2000 22:25:24 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "NJQRP" <NJQRP@njqrp.org>, "QRP-L" <qrp-l@lehigh.edu>
Subject: [65011] SMK-1 Enclosure Kit offered by the NJQRP
Message-ID: <006a01bf871b\$d3ac1480\$59ee7ad1@ire.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, the NorCal QRP Club has done it again with the introduction of another ground-breaking, leading-edge technology QRP kit! Man, I can't wait to get the production SMK-1 rigs onto my bench to try my hand at this new surface mount technology. (See <http://www.redhotradio.com> for details on the SMK-1 Transceiver Kit. Click on the link for SMK-1.)

And to help us all out, the NJ-QRP Club is pleased to offer another "first" for the QRP community: a homebrew enclosure kit made entirely from double-sided copper-clad pcb material. Working closely with NorCal in the introduction of their SMK-1 transceiver, we designed an enclosure tailored to the small-sized SMK-1 and created a kit of all parts needed to finish off this surface mount transceiver.

Included in the SMK-1 Enclosure Kit ...

==> 8 precision-cut, pre-drilled copper-clad pc boards which, when soldered together as instructed, form the enclosure seen on this page;

==> 3 knobs (for the pots included on the SMK-1 pcb from NorCal);

==> Rear panel hardware: two 1/8" audio jacks, a 2.1mm coaxial DC power jack, and a BNC connector;
==> 2 small screws to hold the top half of the case to the bottom;
==> 4 small screws and two nylon spacers to hold the SMK-1 pcb in place;
==> 4 rubber feet
==> pre-printed front and rear panel labels on clear acetate, suitable for gluing to the enclosure to give it a professionally finished appearance; and
==> a 10-page, detailed instruction manual to guide the QRP homebrewer through construction and finishing of the SMK-1 Enclosure.

Price and Ordering ...

The SMK-1 Enclosure Kit can be purchased for \$10 from the NJ-QRP Club. This price includes shipping anywhere in the world. Send cash, check or Money Order payable to "George Heron, N2APB" and mail to:

George Heron, N2APB
2419 Feather Mae Court
Forest Hill, MD 21050

Availability ...

The SMK-1 Enclosure Kits will be shipping in early April, consistent with availability of the SMK-1 Transceiver from the NorCal QRP Club.

Comments from beta builders ...

We had 7 QRPers build the pcb enclosure in preparation for the unveiling of this kit. A sampling of the feedback is shown below:

- "Wow, took only 50 minutes to put this enclosure kit together, and it looks just like the pictures!" - K2HPV
- "My prototype enclosure went together just as planned, with nary a hitch. Looks great." - N2CX
- "Had a little trouble holding the pcb pieces while soldering, but it got easier once I got the knack." - AA2XY
- "I can believe how good this copper-clad box looks when all cleaned and shined up! I'm going to leave it just like this; i.e., no painting". - N2CQ
- "It's amazing how everything fits together so well. Careful pre-cutting and pre-drilling of the material is sure a time saver and quality boost." - WA2ECP
- "Takes me 15 minutes to put these enclosures together, having done it several times now :-)" - N2APB

See a number of photos of the SMK-1 Enclosure at <http://www.njqrp.org/smk-1/>. We plan on having a growing photo gallery to augment the construction of the enclosure. And we plan on having special Elmers being available to assist anyone having trouble with this new way of building kit electronics and the enclosures.

BTW, this is the first time, to the best of my knowledge, where we have 2 QRP clubs working together to put out a kit that everyone can benefit from.

This inherently seems very cool to me. It shares the workload for getting something like this out (*any* kit is a horrendously time-consuming effort, as several of us clubs realize), AND it tends to synchronize and galvanize the efforts from several regional clubs. Again, coalescence of the QRP community is the result. Guys, there are many, many wonderful things coming our way in the near future for us in the QRP community. There's never been a better time to be in QRP, to be homebrewing equipment, and using it all on the air!

And you know what's amazing? This whole project came together in within 7 days! Sure, we leveraged work that was already in-progress, both in the form of the Tx and Rx circuits, and with the enclosure (same enclosure design is being used in the SOP Receiver Kit) ... but there was a tremendous amount of energy behind the scenes in altering designs, spinning new technology pcb's, ordering parts, and coordinating project prototyping across a continent. Shows the power of the Internet, and value of QRP-L ... amazing!

73, George N2APB
n2apb@amsat.org
for the NJQRP Club at <http://www.njqrp.org>

Date: Sat, 04 Mar 2000 20:05:56 -0500
From: Joe Mikuckis <k3chp@erols.com>
To: qrp-l@lehigh.edu
Subject: [65012] Ten Meters
Message-ID: <38C1B2F4.1C64@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

If you need New Zealand, Australia or Japan, get on ten meters around 2300-0100 UTC. The band is hopping with signals almost every night! I worked lots of them with 5 watts.

Joe, K3CHP
Riverdale, MD

Date: Sun, 5 Mar 2000 18:55:21 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "NJQRP" <NJQRP@njqrp.org>, "QRP-L" <qrp-l@lehigh.edu>
Subject: [65013] QRP Homebrewer content overview [long]
Message-ID: <001c01bf8715\$5ec07f40\$59ee7ad1@ire.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, it's been a *very* busy winter with all of the special/extra preparations for Atlanticon and with the new kits from the NJ-QRP Club ... but we received the Winter issue of QRP Homebrewer back from the printer now and it's finally making its way into the mail for first class delivery to all subscribers.

This issue of QHB is another pretty special one, with lots of exciting contributions from many recognizable and notable authors. I think you'll like it. The "theme" this time is Manhattan-style homebrewing ... techniques, preparation, finishing, tools, examples, tutorial, and more. Here's an overview of all the content in this second issue of QRP Homebrewer.

Manhattan-Style Construction, by Chuck Adams, K7QO
Our very own Chuck Adams, K7QO takes center stage with his feature article this time with part 1 of a comprehensive tutorial article on Manhattan-style construction. Written in his characteristic down-to-earth and educational style, Chuck walks us through a brief background and overview of available homebrew construction techniques, and then settles in for a thorough, step-by-step guide on building "a la Manhattan." He covers issues of obtaining material, cleaning and preparing it, cutting it to dimension, soldering and gluing the respective parts, and orienting and soldering the components. The reader even gets walked through several "lab exercises", ending up with functional components for use in the shack and also as a lead-in to the K7QO follow-on article in Spring QHB ... study hard this time 'round, because Part 2 will knock your socks off!

Homebrew Chassis and Panel Labels, by Ed Roswell, K2MGM
Ed is well-known in the NJ QRP circles for being one to innovate with various assembly, construction and enclosure fabrication techniques. The K2MGM contribution this time considers making the labels for the panels of our homebrew chassis. He reviews a couple of the more popular approaches and provides an example of a particularly easy-yet-professional looking one: computer artwork printed out onto acetate overhead transparency material. Produces very nice results.

Antenna Support using 20-foot Collapsible Pole, by Tom Scott, KD7DMH
The ever-popular fiberglass fishing pole (South Bend SD-20, or the Cabella

"Black Widow) is the subject of a nice overview of its use, mounting and utility as a support for light-weight dipoles, inverted Vee's, the N2CX Halfer end-fed half-wave wire, and other wire antennas. Tom provides some current vendor information for locating this ubiquitous field antenna accessory.

The Gummer Tip-Over Antenna Base, by Tony Colagouri, W2GUM

Our famous gadgeteer, Tony "The Gummer", provides another of his "Gummer's Gizmos" in our Winter issue. This time he focuses on a clever contraption to support those ubiquitous fiberglass fishing pole antennas. W2GUM calls it the Gummer Base - an inexpensive tilt-over base for the fiberglass antenna supports like the SD-20 and the Black Widow, as well as for the 30-foot-long DK9SQ collapsible pole. Using commonly-available parts from your local hardware store, Tony details a clever way to quickly plant this antenna support in the field.

Measuring Transistor Gain-Bandwidth-Product, by Glen Leinweber, VE3DNL

Here's a taste of some of the more advanced technical topics of homebrewing. Knowing a transistor's upper frequency gain limit let's you find current gain (hfe) at any frequency.

Glen has provided some expert insight into measuring the "Ft" with some very useful test circuits.

23 Years and 2 Tuna Tin 2s Later , by T.J. "Skip" Arey, N2EI

Expert story-teller Skip Arey, N2EI relates his exploits over the years with the Tuna Tin 2 transmitter, including a review of the NJQRP TT2 Kit.

Useful Mods for your Tuna Tin 2 Kit, by Jake Carter, N4UY

Okay, now that you've got your TT2 transmitter built up and have had a couple of QSOs on it, what do you do? Jake Carter, N4UY describes several mods that he found very helpful in taking his TT2 to the next quantum level. He details a cure for the chirp, a way to boost power to 400mW, and a convenient way to interface the popular TiCK keyer chip to the TT2. Also illustrated is Jake's Manhattan-style construction of his TT2 ... nice job!

Books, Utilities and Websites for the Homebrewer, by Ron Polityka, WB3AAL

Collector extraordinaire WB3AAL continues finding incredibly useful links for all of us on the homebrew scene. This time Ron points us to books, utilities, vendors, parts suppliers, and a couple of great websites.

Just Good Enough Construction, by Joe Everhart, N2CX

The actual name of the N2CX gem article this time is: "The N2CX-Why-Did-I-Ever-Commit-To-This-How-Will-I-Ever-Finish-It-In-Time-And-Still-Keep-My-Job-And-Family-Obligations-PVC-Gusher-Loop-The-Loop-Rainbow-Tuna-Tin-2-Fireball-40-TiCK-Keyer-Ugly-Weekender-FifiField/Meachemized-With-MRX-Technology-1999-Pacificon-Building-And-Operating-Contest-Entry." WHEW! The title of Joe's article says it all :-). Joe also provides good details on his combination of the TT2 transmitter, MRX-40 receiver, Rainbow Tuner SWR

circuit, and his special loop antenna.

QRP Cartage - the Art of Carrying Stuff, by Jim Nestor, WK8G

If you've ever taken QRP to the field (and who hasn't?!), you know all the little do-dads and paraphernalia that need to come along. Jim Nestor, WK8G overviews the techniques he uses in making his field QRP outings successful

BIG LOOPS: The Method and the Madness, by Seabury Lyon, AA1MY

Seabury, AA1MY describes an absolutely wonderful experience that most of us only see in our dreams. With newly acquired 20-acre homefront, Seab details a 1600-foot Big Mamma loop antenna that now provides him with an incredible ERP.

The North Georgia QRP Club, by Sam Billingsley, AE4GX

With each new issue of QHB, we spotlight one of the popular QRP clubs here in the US. Sam, AE4GX gives a nice overview of the NoGA QRP gang, from their active homebrewing and club project activities (way to go guys!!), to their field radioactivity, and their presence in the local communities. If you're a newcomer to QRP and live anywhere in the North Georgia area, be sure to look up these guys ... they have a good handle on QRP and homebrewing.

The Handyman's Guide to Capacitors, by Paul Harden, NA5N

If you're like me, you have a heck of time finding just the right capacitor in your junk box for use in that project on the bench. Let's see, is this little guy good at RF or only at audio frequencies? What's its reactance at 40-meters? Does it matter if it drifts? What's the difference between a "mylar" and a "mono" capacitor? Which kind of capacitor should I buy for this project, from the thousands offered in Mouser? The list of questions is formidable! Well, Paul Harden, NA5N is our outstanding end expert technical resource in the QRP community, and he offers a *fabulous* Capacitor Selection Guide in this issue of QHB. I've referenced the article untold times even before this issue went to press!

The "Common Cents" QRP Dummy Load, by Dave Ottenberg, WA2DJN

Dave WA2DJN is a formidable sidekick to gadgeteer W2GUM and they teamed up to create a very handy piece of equipment that everyone needs in the QRP workbench ... a dummy load. But this is no ordinary dummy load, as it's made by snadwhiching four carbon resistors between two pennies, soldered right on top your favorite antenna connector. So all you need to do is connect this little 1" dummy load connector to your rig ad your as safe as can be.

Butternut in the City, by Ron Polityka, WB3AAL

How many times in your ham career have you been thwarted by a non-friendly antenna environment. I know that I have had all sorts of challenges throughout the years. Ron WB3AAL of EPAQRP fame describes his solution to a common problem of apartment building dwelling and use of a commercial vertical antenna. Nice solution Ron!

Building a Pixie a la Manhattan-Style, by "Hap" Hurst, WA3PTG
Hap is the guy in the NJQRP Club who says "I don't need no stinkin' PCB kit I just do it a la Manhattan"! (With apologies to Hap, this is a paraphrase :-). Well, WA3PTG shows his skill and fervor for Manhattan-style construction in tackling the Pixie transceiver. He provides another wonderful perspective on the steps followed in doing this type of homebrewing. This is a fine guide that complements the K7QO piece and our theme this issue. Thanks Hap!

Ohm's Law Helper, by Dave Ottenberg, WA2DJN
In QHB we cover of some rather advanced aspects of homebrewing all the way down to the beginner ones. Dave Ottenberg again contributes, and this time it's an oldie-but-goodie chart that's good to have taped above the bench. Whenever you need to know power, voltage, current or resistance, a glance at this chart sets you in the right direction.

QRP Kits from the NJ-QRP Club, by NJ-QRP Club
Here's a nice concise summary of the QRP kits offered by the NJQRP Club.

Adding RIT to the SW40+ QRP Transceiver, by Jim Larsen, AL7FS
Our northern-most NJQRP member, Jim Larsen AL7FS offers his views on upgrading of his SW40+ "Elmer 101" rig. So many QRPers have this wonderful and educational transceiver from Small Wonder Labs (<http://www.smallwonderlabs.com>) and Jim details adding a very convenient option to the NN1G rig.

That's it! This Winter issue of QHB is chock full of great contributions from QRPers all over the country ... we sure hope you like it. Let us know what you think.

72, George N2APB
n2apb@amsat.org
editor and publisher, QRP Homebrewer
for the NJQRP Club at <http://www.njqrp.org>

PS: Subscription information can be found at
http://www.njqrp.org/data/qrp_homebrewer.html, or by sending an email to EMBOT@NJQRP.ORG with the words SEND QRP_HOMEBREWER in the body of the message. An email will be automatically returned containing information on the publication.

Date: Mon, 06 Mar 2000 00:48:08 -0500
From: Al Patrick <arp@inet4u.com>
To: bill@pcatexas.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [65014] Re: using a turner
Message-ID: <38C34698.B5E8AE0A@inet4u.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill,

If you'll go to <http://www.mfjenterprises.com/manuals/941e/mfj941e.html> you'll have the entire manual for a MFJ-941E tuner. This is a newer turner with some important differences over the 940 you refer to (both are called Versa Tuner II) and sells for \$120. However, if you'll read the manual on the 941E you'll get a pretty good idea on what to do with the 940.

Hope that helps. BTW, If you have email only (no internet access) let me know and I'll be glad to attach it to a message. It's only about 12.5 k.

Al

Bill Allen wrote:

> Hi Gang!
>
> I have gotten my hands on a second hand tuner - a MFJ Versa Tuner II. Does
> anyone have experience with this tuner? Would someone describe its use?
>
> thx
> KC5ADF
> Bill Allen

--

"The Truth is Hate, to Those Who Hate the Truth"

Date: Mon, 06 Mar 2000 00:52:14 EST
From: n5ib@juno.com
To: qrp-L@Lehigh.edu
Subject: [65015] HB: audio-derived S-meter
Message-ID: <20000305.234458.7783.0.N5IB@juno.com>

I just finished "manhattaning" the audio-derived S-meter from W1FB's QRP notebook, for use with my GM-30 from Small Wonder Labs. The circuit works pretty well. I'm using a small 200 uA movement (VU-meter) salvaged from a tape recorder.

The problem is the expected one - an S-meter scale is essentially a log scale, and this circuit produces a linear response. When I set it up for full scale deflection with 50 uV (S-9) at the antenna terminals, by the time I crank in 24 db attenuation (to get to S-5) we are at less than 10% ($10^{-2.4}$) deflection, so all the signals under S-5 are bunched up at the bottom. I could set full scale at something less than 50 uV, but there will be enough strong signals out there on 30 m to bang the needle on the pin.

Any ideas on a quick (and/or crude) way to delinearize the meter response?

72,
Jim N5IB

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Try it today - there's no risk! For your FREE software, visit:

<http://dl.www.juno.com/get/tagj>.

Date: Sun, 5 Mar 2000 23:19:43 -0700
From: "Floyd Smithberg" <flydnq7x@primenet.com>
To: "QRP-L Message" <qrp-l@Lehigh.EDU>
Subject: [65016] ARRL DX SSB
Message-ID: <005b01bf8734\$0b7aa760\$b93584ce@primenet.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Fantastic conditions this weekend...10 especially. Picked up a few choice ones like Taiwan, Tanzania, Tromelin, Indonesia, Senegal, Kazakhstan, Clipperton and more for a total of 66 unique countries. A surprise was a S8 report from Tromelin.

BAND	QSOs	Points	Countries
40ssb	9	27	8
20ssb	34	102	27
15ssb	74	222	40
10ssb	108	324	47

225 675 122 Score = 82350
Used TS850 at 5W on a modified peak reading WM2 to 3 element yagi with 40M
extended dipole.
Op time ~14 hours.
BTW, got my 99 SS CW pin in the mail saturday.
Floyd NQ7X Phoenix,AZ ScQRPion

Date: Mon, 6 Mar 2000 02:31:50 -0500 (EST)
From: "Paul R. Valko" <prvalko@oakland.edu>
To: David Kritzberg <dkritz@mindspring.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [65017] Unsubscribe errors... Re: A little help please & TNX
Message-ID: <Pine.OSF.4.21.0003060218200.30320-100000@saturn4.acs.oakland.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Just for the heck of it, I went to www.google.com and typed:

qrp-l unsubscribe

in the search box. It returned:

QRParciQRP-L
...your mail Unsubscribe from the list Short list of QRP-L...
...News | QRP Toy Store | QRP-L | QRP-F | GuestBook |...
www.qrparci.org/qrplacc.htm - Cached - 9k - GoogleScout

So I clicked on the link, and there's even a spot on that page where you can click and unsubscribe! EXCEPT... everyone of the instructions is incorrect! Maybe that explains why so many "unsubscribe" posts get sent to the list?! Sheeze, can't buy a break... I hope our ARCI webguru can fix it. The correct links should point to : listproc@lehigh.edu

I have the correct info here, as I created and discussed on qrp-l last week:

<<http://www.acs.oakland.edu/~prvalko/qrpplc.htm>>

73! =paul= W8KC

Collector of Ten*Tecs and other fine plastics.

Visit the Virtual Ten*Tec Museum at:

<<http://www.acs.oakland.edu/~prvalko>>

On Sun, 5 Mar 2000, David Kritzberg wrote:

> Hello,
> can someone give me a tutorial on unsubscribing to the list?
> I don't get to check my email but once per week & it takes way too long
> to sift through all the posts. I've tried to send a command & must be
> fouling it up somehow.
>
> Thanks in advance fer any help & 73
> Dave KF4UOD
>

Date: Mon, 06 Mar 2000 10:27:26 GMT
From: "Pete DeWolf" <kb5hrs@hotmail.com>
To: qrp-l@Lehigh.EDU
Cc: kb5hrs@arrl.net
Subject: [65018] sharing my excitement with the gang
Message-ID: <20000306102726.1998.qmail@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Having spent about an hour of patiently tweaking my Sierra 10 meter module, I was measuring 1 watt of output power. Listening on the band, I heard LA5ZC calling CQ. I gave him my call. To my surprise and excitement, he came back immediately and said "Good afternoon Peter". (obviously Bjornar is using a CD ROM callbook) It was 3PM Albuquerque time. He gave me a 439 RST. I was using an MFJ 1796 vertical. Just wanted to share this. 72 de Pete KB5HRS

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Mon, 6 Mar 2000 07:12:47 -0500
From: "Scott E. Olitsky" <solitsky@acsu.buffalo.edu>
To: <qrp-L@Lehigh.EDU>
Subject: [65019] qrp in Vietnam
Message-ID: <018c01bf8766\$1d1829c0\$414d3018@scott.buf.adelphia.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

My license has been confirmed and I will operate 3W2S0 starting next

weekend. I will be on the qrp frequencies on 20 and 15 meters when possible

Scott
AC3A

Date: Mon, 6 Mar 2000 06:42:29 -0600
From: cd25d@rhapsodysails.com (Bill Slater)
To: "qrp-l" <qrp-l@Lehigh.EDU>
Subject: [65020] Dipole Suggestions, Tnx
Message-ID: <006901bf8769\$6fb4d0e0\$9376130c@willies>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks to all for the dipole suggestions.

I have a 40m inverted v up, awaiting ladder line, and another will put up another this week.

They look like guys to the antenna mast, thanks

73's

Bill
KD5GCX/KT
S/V Rhapsody
<http://www.rhapsodysails.com/sailing.html>

Date: Mon, 6 Mar 2000 07:44:39 -0500
From: "Ken Simpson" <W8EK@fdt.net>
To: "QRP List" <qrp-l@lehigh.edu>
Subject: [65021] Packet and digital mode books FS
Message-ID: <011001bf8769\$bd514900\$057bfea9@kensimps>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Packet and digital mode books for sale:

All are in "almost like new" condition.

Your Gateway to Packet Radio - ARRL
by WA1LOU - 2nd edition - \$ 8

Getting Started with Packet by K4TWJ
Dave Ingram - National Amateur Radio Assoc. - \$ 5

Digital Communications with Amateur Radio
The Complete Packet Radio Book
by Jim Grubbs, K9EI - A Radio Shack Book \$ 5

Prices do not include shipping from Florida.

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net or W8EK@juno.com
Voice Phone (352) 732-8400

Date: Mon, 6 Mar 2000 08:13:22 -0500
From: hamjoel@juno.com
To: qrp-l@lehigh.edu
Subject: [65022] Re: Now this is QRPppppppppppppppppp!
Message-ID: <20000306.081429.-228681.1.hamjoel@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

I was wondering about the 8 watts used on the xmtr.... however.... 1km/w
is 1km/w... regardless of power used... meaux power just means u gotta go
lots meaux farther to make the distance equal 1km/w

I think this would be an excellent situation to make an exception to the
5 watt limit... due to the extreme m/w achievement...

I don't see any violation of "the spirit" of the certificate or it's
integrity... however I do wear trifocals... :-) PERHAPS A "SPECIAL
CERTIFICATE" that would comply with "the letter" of the law....
rules.... good pr being passed up heah... and that's ok too...

Joel KE1LA
In Maine

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<http://dl.www.juno.com/get/tagj>.

Date: Mon, 6 Mar 2000 08:51:44 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "NJQRP" <NJQRP@njqrp.org>, "QRP-L" <qrp-l@lehigh.edu>
Subject: [65023] Re: SMK-1 Enclosure Kit offered by the NJQRP
Message-ID: <003a01bf8773\$1f840dc0\$e6ca9cce@ire.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guys, sorry for the broken link to the SMK-1 Photo and the Enclosure Kit information page. It's all working now.

There was a *major* crash of the Erols Internet Service Provider system this weekend, and it's only now (partially) starting to come online. I had the QRP Homebrewer message, the SMK-1 Enclosure announcement, and the website information ready *all* weekend for the upload, but the dang system wouldn't let me get in. You can probably appreciate how frustrating it was to be incommunicado knowing that major announcements were underway (and being part of them!) The whole eastern seaboard group of Erols subscribers were down yesterday! And it also probably took out quite a few QRPers along the way.

For full information and photos of the NorCal SMK-1 Transceiver Kit and the NJQRP SMK-1 Enclosure Kit, see:
<http://www.njqrp.org/smk-1/>
<http://www.fix.net/~jparkner/norcal/smk1/smk1announce.htm>
<http://www.redhotradio.com>

73, George N2APB
n2apb@amsat.org

----- Original Message -----

...

And to help us all out, the NJ-QRP Club is pleased to offer another "first" for the QRP community: a homebrew enclosure kit made entirely from double-sided copper-clad pcb material. Working closely with NorCal in the introduction of their SMK-1 transceiver, we designed an enclosure tailored

to the small-sized SMK-1 and created a kit of all parts needed to finish off this surface mount transceiver.

[snip]

Date: Mon, 06 Mar 2000 09:04:56 -0500
From: Laura Halliday <va3ldh@sympatico.ca>
To: qrp-1@Lehigh.EDU
Subject: [65024] Re: [Toronto] Buying gel cells
Message-ID: <38C3BB08.51E0E206@sympatico.ca>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I've had mine hooked up to the charger overnight and it seems to be coming back to life. Now to see if it stays alive.

Surplus stuff is always a crap shoot. If the battery proves to be a dud I'll use it to hold doors open, or incorporate it in my workouts.

--

Laura Halliday VA3LDH "Laisse le vent tout emporter..."
Grid: FN03gs - Foly/Viennet

Date: Mon, 6 Mar 2000 09:47:18 EST
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu
Subject: [65025] 160M SURPRISE
Message-ID: <6d.1c7884e.25f51ef6@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Well last nite so one from the group showed up on 1.970 from the group but had a great chat with a fella in Oregon. The big surprise was Sunday morning during the contest. Could ot sleep so about 1AM local tuned up the rig and switched to 160M band for a listen. Heard a few strong signals and I thought I would just jump in and try my luck. Only 7 contacts in that hour: MA, AK, MEXICO, HI, CA, IL and OR. Not too shabby with that end fed wire and about 40-50 watts. 160 sure is a blast AND a pleasant surprise..... Alan

KB7MBI

Date: Mon, 06 Mar 2000 10:06:58 -0500
From: "Caitlyn M. Martin" <caitlyn@netferrets.net>
To: thp@onelist.com, qrp-1@lehigh.edu
Subject: [65026] Importing the HT-750
Message-ID: <38C3C992.A46E11C2@netferrets.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

radioham@home.com wrote:

> Me too, and I guess others, 3, 4, 5 and so on. Would love to have one
> also. I am considering selling my AEA DX Handy for 10 meters if there is
> interest, but would like to replace it with a 3 bander.

I suspect a lot of us on the Tokyo Hy-Power and QRP-1 lists would like a nice HT-750. (OK, I don't need another, but...) The solution, in the past, if you couldn't find a used one, was to import one from Japan yourself. Tokyo Hy-Power, unlike most other Japanese ham companies without distribution in a given country (the U.S. and Canada, in this case), will deal directly with overseas hams, have English-speaking staff, and have proven to be very helpful to a number of us. The problem is that the rig is temporarily out of production, last I heard. The good news is that THP will do another production run if there is sufficient interest.

I want to make really, really clear that I do **not** think we should flood their fax machine or their inbox. OTOH, if you are honestly, sincerely, ready to buy a shiny new HT-750, by all means ask for ordering information. Current price for the rig is 69,800 yen, or about US \$630. That's only slightly more than what they were selling for here seven years ago. Do remember that the loading coils, pull up whip, speaker mic., and leather case are all extra, optional accessories. A complete set including all of that will run you close to \$800 plus shipping.

The HT-750 has always been expensive. Is it worth it? IMHO, yes. The radio is absolutely unique, and is, to me, the QRP portable dream machine. Pictures of me operating one still adorn my website. The receiver performance on all three bands (6, 15, and 40) that they've gotten into a handheld package is still pretty amazing.

So, if you are really ready to spend that much money on a handheld, here is the current contact information for Tokyo Hy-Power:

TOKYO HY-POWER LABS.,INC.

1-1,HATANAKA 3-CHOME,NIIZA, SAITAMA 352-0012 JAPAN
PHONE +81-48-481-1211 web: <http://www.thp.co.jp>
FAX +81-48-479-6949 mail: info@thp.co.jp

If we have sufficient interest, and if THP is, in fact, producing them again, perhaps we can look at a group buy. I think we should use the Tokyo Hy-Power reflector to keep up on our progress in obtaining these rigs. OK, it might be dull for those who have theirs already, but somehow I don't think we are talking about a whole lot of messages.

Good luck, and 72/73,
Caity
KU4QD

Date: Mon, 6 Mar 2000 10:02:57 -0500
From: "Hare, Ed, W1RFI" <w1rfi@arrl.org>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [65027] RE: March QST
Message-ID: <125490A005E3D3118C9C00805FC743CC08D2AF@mail.arrl.org>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

> Just thought I'd point out that the survey on the
> arrl.org web site right now is asking us to vote for
> the best article in that issue.
> Let's make sure a QRP writer wins the award!

> My vote goes to Lew Smith for his 10-meter QRP
> transmitter.

One point of clarification, this is the survey on the members-only page at:

<http://www.arrl.org/members-only/qstvote.html>

If any ARRL members are not registered for the members-only page, go to <http://www.arrl.org/members/>. If you are registered, but forgot your password, you can re-register at the above address and give yourself a new password. To register, you will need your membership number, from your QST label. Any members who don't receive QST (blind, family), I can look up

your membership number.

BTW, the TT2 article is NOT included in the survey because HQ staff bylines are not eligible for the cover plaques. Besides, that really wasn't my article anyway; it was edited from original DeMaw material.

And keep those comments coming to qst@arrl.org. :-)

73 from ARRL HQ,
Ed Hare, W1RFI
ARRL Laboratory Supervisor
225 Main St.
Newington, CT 06111
860-594-0318
Internet: w1rfi@arrl.org
ARRL Web: <http://www.arrl.org/>.
ARRL Technical Information Service: <http://www.arrl.org/tis>.

-----Original Message-----

From: Gary Lee Phillips [<mailto:ka9nzi@arrl.net>]
Sent: Saturday, March 04, 2000 6:47 AM
To: Low Power Amateur Radio Discussion
Subject: March QST

I have taken Ed's suggestion and written a brief message to both the editors and my division director in support of the QRP features in the March issue and encouraging more promotion of QRP.

Just thought I'd point out that the survey on the [arrl.org](http://www.arrl.org) web site right now is asking us to vote for the best article in that issue. Let's make sure a QRP writer wins the award!

My vote goes to Lew Smith for his 10-meter QRP transmitter.

-- Gary Phillips, Marengo, IL <mailto:ka9nzi@arrl.net>
KA9NZI, Seneca Twp., McHenry Co., IL Grid: EN52rg
QRP ARCI #5154 <http://www.netcom.com/~fufffe/>

Date: Mon, 6 Mar 2000 09:27:24
From: "Henry Knoll" <knoll1003@tc.umn.edu>
To: qrp-1@Lehigh.EDU
Subject: [65028] WTB: PSPICE Book
Message-ID: <iss.1efc.38c3ce5c.ab4b5.1@amethyst.tc.umn.edu>

MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I'm looking for a copy of "PSPICE a Tutorial" by L. Fenical. It is out of print, so not in any bookstore. If anyone has one they would like to sell, please contact me direct. knoll003@tc.umn.edu

Thanks and 73/72

Henry WA0GOZ

Date: Mon, 06 Mar 2000 09:41:27 -0600
From: "George T. Baker" <w5yr@att.net>
To: knoll003@tc.umn.edu
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [65029] Re: WTB: PSPICE Book
Message-ID: <38C3D1A7.3F447044@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Contact <http://www.amazon.com>

They have a network of used book stores and can find just about anything that was ever in print. Just do a search on your title and see what they come up with - might take a little time.

72/73, George
Fairview, TX 30 mi NE Dallas in Collin county
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556

Henry Knoll wrote:

>

> I'm looking for a copy of "PSPICE a Tutorial" by L. Fenical. It is out of
> print, so not in any bookstore.

Date: Mon, 6 Mar 2000 10:37:00 -0500
From: Nils R Young <nilsbull@juno.com>
To: QRP-L@lehigh.edu

Subject: [65030] HW-# corntest & similar stuff
Message-ID: <20000306.103709.-448989.0.nilsbull@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Gang,

Not wanting to start another impossible cell-phone based thread, I still must admit that a contest or operating event of some sort for those "early" QRP transistor rigs would be sweet. I'd jump in, if only to prove to myself that I can still understand how to tune to proper offset on one of 'em.

We could have all the HW-# classes and add other direct conversion rigs like the PM-# series and others like the CM Howes DC rigs. I add the Howes DC radio only 'cause it's the only piece of working DC I've got right now.

Kits, of course, would not be considered home brew 'cause we didn't build the casks to age 'em in ourselves. Or some similar ratiocination involving cell-phones, gas lines & lightning rods. White lightnin', however, would be different. If we operated the DC rig while smoked on white lightnin' we could get a special bogus award.

And a special category for those using surplus QRP stuff, signed by SecDef or ONI or something having to do with bathtub pipes & leather. Yeah.

73

Nils

Nils R. Bull Young -- El Gringo Errante -- La Estancia de los Guajolotes
Sonrientes

<http://home.fiberia.com/wb8ijn> -- W8IJN --

<http://members.xoom.com/nilsbull>

In my day you had to FIGHT to have digits! Every DAY was a STRUGGLE!

--- Comrade Nikolai Sergeevich McTovarishov

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<http://dl.www.juno.com/get/tagj>.

Date: Mon, 6 Mar 2000 07:54:08 -0800 (PST)
From: =?ISO-8859-1?Q?"KB=D8VCC"?= <kb0vcc@yahoo.com>
To: qrp-l@Lehigh.EDU
Subject: [65031] PSK31: Interfacing to FT-990's DVS-2 Interface...
Message-ID: <20000306155408.12697.qmail@web1205.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hey Gang,

Any of you experts out there familiar with Yaesu's DVS-2 port? A little too creative for my own good, I built (without breadboarding) a new PSK31 interface for my main rig. I wanted to minimize cable connections, so I made up a cable to connect to the 7-pin DIN connector of the rig's DVS-2 port. This port has basically everything I need to do this with, PTT, GND, audio-IN, audio-OUT, etc. The problem is, after building this THEN testing it, I discovered that the audio-IN of the port does not work. I can input into the mic port, and that works fine, but the DVS-2 audio-in doesn't seem to be "listening" to my interface. There are two CTRL lines on that port, and I suspect they have something to do with what I'm experiencing. Is there anyone on this list who can tell me what those two lines do, or give me suggestions on how to get the rig to listen on that port? I've already tried doing the enable/disable on startup thing, but to no avail. All else through this port works fine, but I just need to get this line working and I'll have a single-cable interface to the rig! I thought I'd try here before posting to the Yaesu reflector.

Thanks and 72/73!
Dale

=====

```
=====
Dale Anderson           In the Mt Washington Valley
KB0VCC                  Conway, New Hampshire
QRP-L #91 / CQC #251    Grid Sq: FN43KX
ARS #234 / FISTS #3172  http://www.qsl.net/kb0vcc
=====
```

Do You Yahoo!?
Talk to your friends online with Yahoo! Messenger.
<http://im.yahoo.com>

Date: Mon, 06 Mar 2000 11:08:06 -0500
From: Thomas Jennings <jennings@eng14.rochny.uspra.abb.com>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [65032] qprttf: When is it this year...
Message-ID: <38C3D7E6.22F94D8@eng14.rochny.uspra.abb.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi guys,
I was wondering when qprttf is this year.
Anybody know??
I need to make some travel plans...

tu es 73,

Tom, kv2x

Date: Mon, 06 Mar 2000 11:12:31 -0500
From: Zack Lau <zlau@arrl.org>
To: qrp-l@lehigh.edu
Subject: [65033] Re: QRP more popular than ever?
Message-ID: <38C3D8EF.B0382547@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have cards from both of them for 1997 20M QSOs. I wonder if you
could have worked them on multi-hop E skip on 10M back then?
73--Zack Lau W1VT

Date: Mon, 6 Mar 2000 10:21:44 -0600
From: Karl Kanalz <KKanalz@excel.com>
To: "'va3ldh@sympatico.ca'" <va3ldh@sympatico.ca>, Low Power Amateur Radio
Discussion <qrp-l@Lehigh.EDU>
Subject: [65034] RE: [Toronto] Buying gel cells

Message-ID: <2D343922E283D211945C0008C7A41B2A01A74545@adntex01.adsn.dal.excel.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Or, My Dear, you could always use it as an anchor
on one of your radio-controlled sailing models!

Karl K - W8TIF
McKinney, Texas

-----Original Message-----

From: Laura Halliday [mailto:va3ldh@sympatico.ca]
Sent: Monday, March 06, 2000 8:05 AM
To: Low Power Amateur Radio Discussion
Subject: Re: [Toronto] Buying gel cells

I've had mine hooked up to the charger overnight and it
seems to be coming back to life. Now to see if it stays
alive.

Surplus stuff is always a crap shoot. If the battery
proves to be a dud I'll use it to hold doors open, or
incorporate it in my workouts.

--

Laura Halliday VA3LDH "Laisse le vent tout emporter..."
Grid: FN03gs - Foly/Viennet

Date: Mon, 06 Mar 2000 11:38:01 -0500
From: "John Humphrey" <jhumphre@ultra-tech.com>
To: qrp-l@lehigh.edu
Subject: [65035] Atlanticon: Room to Share
Message-ID: <s8c398aa.066@ultra-tech.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline

Hi Gang,

Like Seab, my wife bailed on me. We are going away together this =
weekend and I don't think she=20
could stand two in one month. So, I too have a room to share, if anyone =
is interested. Please
respond directly, Thanks,

72,73,

John W4IM QRP-L #1691
Stafford, Va.

Date: Mon, 6 Mar 2000 11:29:05 -0800
From: bruceshaw@juno.com
To: w5yr@att.net
Cc: qrp-l@Lehigh.EDU
Subject: [65036] Re: WTB: PSPICE Book
Message-ID: <20000306.113102.-1789141.0.bruceshaw@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

I have also had good luck with <http://www.bibliofind.com> This goes to the used bookstores all over the country. Amazon will find it but they also add a pretty hefty markup!
Bruce Shaw
kg4dzu

On Mon, 06 Mar 2000 09:41:27 -0600 "George T. Baker" <w5yr@att.net> writes:
> Contact <http://www.amazon.com>
>
> They have a network of used book stores and can find just about
> anything
> that was ever in print. Just do a search on your title and see what
> they
> come up with - might take a little time.
>
> 72/73, George
> Fairview, TX 30 mi NE Dallas in Collin county
> Amateur Radio W5YR, in the 54th year and it just keeps getting
> better!
> R/C since 1964 - AMA 98452 RVing since 1972 Kachina
> #91900556
>
>
> Henry Knoll wrote:
> >
> > I'm looking for a copy of "PSPICE a Tutorial" by L. Fenical. It
> is out of
> > print, so not in any bookstore.

Date: Mon, 6 Mar 2000 12:04:04 +0000
From: "Steven Weber" <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [65037] Disposing of gel cells
Message-ID: <200003061643.LAA27489@wolf.ncia.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

> Surplus stuff is always a crap shoot. If the battery
> proves to be a dud I'll use it to hold doors open, or
> incorporate it in my workouts.

Fact of life is gel-cells do go bad eventually and need to be
disposed of at some point.

It's not proper to just thoss them in the trash, they need to be
recycled. Easiest way to do that is take them to an auto service
place. They will add them to thier pile of dead car batteries and a
recycler will eventually come and pick them up.

72,
Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

Date: Mon, 06 Mar 2000 08:45:06 -0800
From: Allan G Taylor <agtaylor@llnl.gov>
To: qrp-l@Lehigh.EDU
Subject: [65038] Re: K2 SSB!
Message-ID: <38C3E092.4197@llnl.gov>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

For the record, I am the possessor of a QSL for Ed's first-ever
SSB QSO. Two cw nuts trying to use a microphone... what a gas!

Boy is that K2 pretty inside. Now to do the ssb module for mine.

Ed
--

Allan Taylor K7GT agtaylor@llnl.gov
DXCC/40CW DXCC 2000 Millenium award
SOC #6 QRP ARCI #10146 HI/QRP #93

Date: Mon, 6 Mar 2000 10:20:47 -0700
From: "Rod, N0RC" <n0rc@qsl.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [65039] Atlanticon SNAP questions
Message-ID: <026901bf8790\$78bf3320\$a5101004@compaq>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks:

I having a small problem with my SNAP. The OSC doesn't always start.

- o Observing the output on a scope I see a burst of activity at 3.58MHz at 3-4Vpp then it goes into 3rd harmonic OSC at 0.5-1.0Vpp.
- o If I touch the XTAL with my finger and apply power it starts fine and run _IF_ I hold my finger on the XTAL can. Removing my finger right away causes the circuit to behave as described above.
- o If I touch the XTAL to get things started, then hold my finger in place for a few seconds before removing it, the circuit works fine.

Conclusion: As a little heat build up from running component characteristics change just enough to permit normal operation.

Question: What is changing when I touch the XTAL to get things started?

Next action: Not sure, component values must remain the same. Otherwise, I'd fool around with the emitter series R, or base bias. I have tried different transistors. With a plastic package 2N2222A I can't get the OSC to start at the fundamental Freq. I have a metal can 2N2222 in the circuit now. Ideas?

72/3 Rod, N0RC -- Fort Collins, CO

Date: Mon, 06 Mar 2000 12:35:29 -0500
From: "Pete (N9SSA)" <n9ssa@arrl.net>
To: qrp-1@Lehigh.EDU
Subject: [65040] OP: Miles Per Watt calculator UPDATE - Grid-Square

Message-ID: <4.3.2.20000306123219.00cb2f00@172.16.1.100>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Howdy -

I've added Grid-Square to Latitude/Longitude conversion to my MPW
Calculator at:

<http://www.qsl.net/n9ssa/mpwcalc.html>

Check it out, and let me know what you think.

Enjoy!

N9SSA - Pete Hoffswell
Holland, MI - EN62wt - 42.79N 86.15W
n9ssa@arrl.net <http://www.qsl.net/n9ssa>
QRP-L #2109

Date: Mon, 06 Mar 2000 09:39:05 -0800
From: Ed Loranger <we6w@qsl.net>
To: qrp-l@lehigh.edu
Subject: [65041] QRP Net fun.
Message-ID: <38C3ED39.5412@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang, the net was well attended last night.
We started at 0300Z and the last of us were
finishing at 60 WPM at 0540Z!

That's right, Ben/NW7DX got to 60 WPM last
night. What a feat! That is one of the
great accomplishments for sure. Afterwards
we had a SSB QSO up on 7183 KHz -- What a gas.

I ran the bug and took awhile to get the dahs
short enough to get above 40 WPM. In fact, I
stayed at 40 WPM for a few rounds while Ben
marched up to 50 WPM. Then I moved up to 46
and 48 WPM. I did get the dahs down to being
short enough but it was tough for sure. At the
very end I got to 55 WPM dits and about 44 WPM

Dahs but that was the best I could do. More practice needed.

I have the original weight for the Vibroplex and it goes from 13 WPM up to 30 WPM (I timed them with "PARIS" for 1 minute. I then used two drill stops for weights. Stuffed each of the drill stops with some firm, black ESD foam and the new weights hung on well and were easy to slide when Changing speed.

One weight ran from 26 WPM up to 38 WPM and the smallest from 36 WPM up to about 55 WPM. hopefully I'll make some real weights for QRQ.

Here's the list:

WE6W, NW7DX, W7IHN, W6RA, K7TQ, AA1LL/6.

Ed, Ben, Barney, Randy, Randy, Paul.

Also, Wayne/NB6M called from his sailboat off the coast of Mexico that he copied most of us but couldn't be heard. (Email report from him).

Well, that wrapped it up for K0EVZ's K2. It shipped today and I started a 3rd K2 Saturday. Finished the SSB, Noiseblanker, and 80% done with the Control board. Maybe have 40 Meters up and running for Thursday's fox!

Maybe hear some of ya for the Spartan Sprint tonite?

72/Ed we6w

--

-72/Ed WE6W; A-1 OP; SOC #63 "AGN?"; QRP-L#1068

<http://www.qsl.net/we6w> Santa Rosa, CA

Call Tobor, The 8th Man, to the rescue!

Date: Mon, 6 Mar 2000 12:54:16 -0500

From: "Mike Czuhajewski" <wa8mcq@erols.com>

To: <kc8aon@juno.com>

Cc: "QRP forum" <qrp-l@lehigh.edu>

Subject: [65042] Re: Toroid identification ?

Message-ID: <002401bf8794\$fd7e84e0\$5ab0db26@MCzuhajewski.EVI-INC.COM>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Unfortunately, there is no industry standard color code for toroid cores, either ferrite or powdered iron. The color code that we "know" is actually the code used by Micrometals. Fortunately we all get our cores from just a few places, and those all pretty much come from Micrometals one way or another. That makes the powdered iron color code that we're familiar with a de facto standard in the ham world, but it is not, unfortunately, a standard in the industry.

If you know that the green core you mentioned was made by Micrometals, or came from one of their retailers such as Amidon, then you can tell what it is. If you don't positively know that it came from that one manufacturer, then all bets are off. Anyone can make a toroid of any type they want, and paint it that color. It could be a powdered iron or ferrite, and it could be of any value. After doing some research of various manufacturers several years ago, I discovered that the bottom line is that any toroid can be any color that the manufacturer wants to put on it :-(A green core could be powdered iron or it could be ferrite, and the permeability could be anywhere from single digits into the thousands.

What you could do is treat that core as if it were from Amidon, look up the permeability value, wind several turns of wire on it, calculate the inductance, then measure it to see if you have that value. You might get lucky and find that it is indeed a Micrometals core, and be able to trust that green color, or it might turn out to be something totally different.

Personally, I never, ever trust any toroids that I see at hamfests to be what the seller says they are. Well, almost never. I did make an exception once. Someone was selling a bag of 500 cores that were plainly identified by a manufacturer label as being T30-6, *AND* their appearance matched that part number (right size and color, texture, etc). I took a chance. I later tested them at home and found they were indeed that item. Another exception is a local surplus store that occasionally hits hamfests and sells a number of different toroids that he claims are from Amidon, and they are. I can buy from him with confidence because I know and trust him and know the source of the cores. With most hamfest dealers I do not have that assurance and pass them by.

73 and queue our pea DE WA8MCQ

Date: Mon, 6 Mar 2000 13:30:09 EST
From: KF4YYD@aol.com
To: qrp-l@lehigh.edu
Subject: [65043] (no subject)
Message-ID: <31.213acc5.25f55331@aol.com>

MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

All,

I have received my Gusher Classic Ant. Kit, from Joe N2CX, and want to configure it for 40 meters. According to the documentation, for all bands BUT 40 cutting it for the middle of the band is the way to go. So since I am cutting it for 40 and I'm just starting out how long should each half be? Yes, I know the formula for the 1/4 wave dipole is $L = 234/F(\text{MHz})$ I just want to be able to use it for the most band coverage for when I upgrade ect.

BTW the turn around time from Joe was incredible and the quality of the kit is very good.

Thanks,
Tom KF4YYD

Date: Mon, 6 Mar 2000 13:30:17 -0500
From: "Everhart, Joseph @ CSE" <jeverhar@mail.cse.l-3com.com>
To: "'n0rc@qsl.net'" <n0rc@qsl.net>
Cc: "'qrpl'" <qrp-l@lehigh.edu>, "'njqrp'" <njqrp@njqrp.org>
Subject: [65044] RE: Atlanticon SNAP questions
Message-ID: <56AE25C909CED311BEA70000D11AD11E3A0B08@l3c-xchg-cse.mail.cse.l-3com.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Rod, you wrote, in part:

>Folks:

>

>I having a small problem with my SNAP. The OSC doesn't always start.

>

>

>o If I touch the XTAL with my finger and apply power it starts fine
>and run _IF_ I hold my finger on the XTAL can. Removing my finger
>right away causes the circuit to behave as described above.

>

>o If I touch the XTAL to get things started, then hold my finger in
>place for a few seconds before removing it, the circuit works fine.

Well crystals can be funny beasts. They exhibit a variety of resonances and are usually constructed to work properly in a predefined circuit. The SNAP just may be different enough from the originally intended purpose that some crystals in a given batch may not oscillate reliably

without some special care.

I suspect that what you are seeing is an overtone response that is favored in this circuit. Commonly higher frequency crystals (24 MHz and higher) operate in the overtone mode since "fundamental" frequency crystals get increasingly fragile as their "cut" frequency goes up. The overtones are close to odd multiples of the lowest resonance frequency analogously to the way that a 40 meter dipole exhibits a resonance in the 15 meter band.

It is mildly unusual for a crystal to favor its overtone mode rather than the fundamental - in fact one of the usual problems is getting overtone rocks to oscillate at the overtone frequencies and not lower!

But considering the fact that these are mass-produced "economy" crystals, their characteristics may not be as tightly controlled as those that get a lot of individual attention and cost as much as a good dinner!

When you touch the crystal's case you are probably adding a slight capacitance to ground that makes the circuit "want" to sing at the fundamental.

A simple "no-cost" and no extra parts solution might be to simply solder a piece of small-gauge bus wire to the case and ground it!

The SNAP is becoming a learning tool, isn't it? Remember what Chuck says - "Learning is expensive, no matter how you get it." OTOH this is a pretty cheap lesson!

72/73,

Joe E., N2CX

Date: Mon, 6 Mar 2000 13:50:31 US/Eastern
From: n2cx@voicenet.com
To: :KF4YYD@aol.com
Cc: qrp-1@lehigh.edu, njqrp@njqrp.org
Subject: [65045] Re: FW: (no subject) (Cutting a dipole for 40 meters)
Message-ID: <200003061850.NAA20704@nss4.cc.lehigh.edu>

Tom,

Thanks for the plug!

There are a couple of ways to go...

1. If all you are interested in is cw operation, cut the antenna for 7100 kHz and it will cover both the low end of 40 plus the Novice portion (which may be a moot point soon anyway.)
2. If you want to go from 7000 to 7300 so that you cover both the cw and phone portions cut it for 7150. The SWR may be a little higher at the band edges but 40 is fairly narrow percentagewise so it won't make much difference.
3. If you really want low SWR over the whole band, segment the dipole so that the inner section favors the "phone" end of the band, say 7250, then add enough wire past the jumperable insulators to resonate it at the cw end of the band.

Good luck and...

72/73,

Joe E., N2CX

You wrote:

>
> All,
> I have received my Gusher Classic Ant. Kit, from Joe N2CX, and want to
> configure it for 40 meters. According to the documentation, for all bands
> BUT
> 40 cutting it for the middle of the band is the way to go. So since I am
> cutting it for 40 and I'm just starting out how long should each half be?
> Yes, I know the formula for the 1/4 wave dipole is $L = 234/F(\text{MHz})$ I just
> want
> to be able to use it for the most band coverage for when I upgrade ect.
> BTW the turn around time from Joe was incredible and the quality of the
> kit is very good.
> Thanks,
> Tom KF4YYD
>

This message was sent using Voicenet WebMail.
<http://www.voicenet.com/webmail/>

Date: Mon, 06 Mar 2000 11:02:33 -0800

From: Ed Loranger <we6w@qsl.net>
To: qrp-l@lehigh.edu
Subject: [65046] New Norcal Kit.
Message-ID: <38C400C9.6AB0@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Oh my goodness! I just read Doug's post about the Norcal kit. (0305 archive). And I see Dave and I had the first QSO on the SMK-1! Oh my, oh my!

Indeed, I heard AD6A, it sounded like a familiar call and decided to answer. Indeed Dave and I had a fine qso.

I'm gonna save up and get both the pcboard CASE and the Rig. I'd get it today but I just paid off a really nice backpack.

And Dave was so cavalier about it. " Oh, its just a MRX-40/TT2 rig I built..... I'll be showing it at the NorCal meeting tomorrow..."

Uh-huh. You sly dog, you. Glad I keep the rig on when I build them K2's.

Save me a case and rig --
I'll see you guys payday after next.

72/Ed we6w

--

-72/Ed WE6W; A-1 OP; SOC #63 "AGN?"; QRP-L#1068
<http://www.qsl.net/we6w> Santa Rosa, CA
Call Tobor, The 8th Man, to the rescue!

Date: Mon, 6 Mar 2000 14:03:51 -0500
From: "Hare, Ed, W1RFI" <w1rfi@arrl.org>
To: "'n0tu@webaccess.net'" <n0tu@webaccess.net>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [65047] RE: Tell us about ur Binaural Receiver.
Message-ID: <125490A005E3D3118C9C00805FC743CC08D2C5@mail.arrl.org>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi, Steve,

When I first saw one in the ARRL Lab, I wanted one. A few months later, I met Bill Kelsey of Kanga US at Dayton and saw the Binaural Receiver with the QST reprint for sale on his table. When I saw the little inset in the article where I told the world I had to get me one of those, I had to keep my word and get me one of those. I showed the inset to Bill, then whipped out my credit card. :-)

It went together fairly easily, with only one hitch. I should have noticed, but didn't, that the 2N3904 transistors were 2N3906 transistors, both in reality and on the parts list. Surprisingly, it worked, but just didn't seem very sensitive. I built up a little MMIC preamp and it heard just fine (Feb, 1987 QST). I received a nice letter from Bill a few weeks later, explaining the problem, with the correct transistors. The preamp was no longer needed, though I left it in (more about that later). I include this bit of info in case anyone has an unbuilt one setting around; double check that the transistors are NPNs.

You may have read reports of a few problems I have had with the unit. In each case, it is the external MMIC preamp, not the receiver, that failed; I guess the MAR-6 devices just don't make good preamps. In one case (my error), we transmitted into the receiver; in the other, I don't know what the problem was the second time, but it appears to be the MMIC again. The receiver itself seems to be pretty reliable.

I do like it. The stereo effect is not dramatic, but very evident. It is relaxing to listen to it. In the pileups, it does help quite a bit to have some spatial separation in there. I will give this receiver a try when I get to the the Fox, and let you know more then how it handles the big pileups. :-) As received, though, it is WAY too wide; there was virtually no audio filtering. I build up an op-amp low-pass filter from the ARRL Handbook, to get about 1500 Hz. Now, keep in mind, it is NOT single-signal, so I hear sigs above and below the DC BFO frequency. As received, it also does not have a lot of audio output and needs high-impedance headphones. Those not too concerned about battery drain would be advised to build an LM386 or equiv audio amp. (The Beyond the Quick mutable amp is one.)

I built mine into a small metal chassis, but by the time I added the Quick keyer, the Beyond the Quick mutable amps and PIN diode T/R switch and the stereo low-pass filter, it is a bit crowded in there. I am going to put it into a larger chassis. It was suprisingly mechanically stable, although a drop of glue on the oscillator coil would probably be a good idea. I don't know if it would maintain its stability if the chassis were other than metal, though some plastics can be more rigid than the thin metal used in most chassis enclosures.

Its weaknesses (stock) are the lack of filtering and relatively low audio

output. Those were correctable. Its strengths are that it is a fun, different kind of receiver that can help in some QRM conditions (after adding external audio filtering). Where it shines for me, though, is in QRN. The desired signal is centered in the passband and centered between my ears, but the static crashes are spread out left-to-right. My brain hates QRN and the spatial separation really makes a difference.

I am glad that I spent the \$100 or so it cost. It is a different kind of receiver and most of the time, I prefer it to my OMNI D. I do switch over to the OMNI D when I am trying to dig a weak one out of the noise, though. What is really cool is the Stereo/mono switch I put in. I set it up for folks, and put the switch in mono. They listen and say "that's nice, Ed." I then switch the switch and can tell those who have good hearing in both ears; the look on their face changes dramatically. :-) I think I have gotten \$100 worth of fun out of watching the look in people's faces. :-)

73,
Ed Hare, W1RFI

-----Original Message-----

From: Steve/n0tu [mailto:n0tu@webaccess.net]
Sent: Saturday, March 04, 2000 10:37 PM
To: Low Power Amateur Radio Discussion
Subject: Tell us about ur Binaural Receiver.

Hey Ed,

Understand you've built the Binaural Receiver and use it w/TT2? Was it difficult to get going? Can you describe how it sounds and how you like it's performance?
Does it really need a steel chassie?

I'm interested in building one myself. Tks Steve/n0tu

Date: Mon, 6 Mar 2000 13:13:46 -0600
From: "Dan W. Dooley" <dandooley@pipeline.com>
To: "QRP List" <qrp-l@Lehigh.EDU>
Subject: [65048] OT: Clipperton
Message-ID: <000c01bf87a0\$4848a220\$04987b7b@dooleydw>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Sorry for the Off Topic post.

Does anyone know where Clipperton has been listening on 75 at night? Xmt.
freq. is published at 3795.

Tnx

Dan W. Dooley WB5TKA Bedford, Texas EM12ku

e-mail to: dandoooley@pipeline.com

May Goddes love blest ye alle

SOC#198

"Ancient Pistol, I do partly understand your meaning."

Date: Mon, 6 Mar 2000 14:36:53 EST
From: NOUR1@aol.com
To: qrp-1@lehigh.edu
Subject: [65049] FOX: Final log NOUR
Message-ID: <ea.2a7a097.25f562d5@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Again, Thanks to all who hung in there that noisy night.

0000	K0EVZ	579 MD DOC	861
0001	N4ROA	579 VA DAN	970
0001	N0AR	559 MN SCOTT	1455
0002	W0CH	559 MO DAVE	618
0003	VE5RC	559 SK BRUCE	886
0003	WS4S	599 TN CONRAD	993
0004	N0EHW	599 MO TIM	2047
0005	K1VP	559 NH ED	1960
0005	AJ4Y	579 FL PAUL	1795
0006	K1JD	579 RI JOHN	1945
0007	N0TU	599 CO STEVE	911
0007	N0EA	559 MO WAYNE	1058
0008	K1QM	579 MA JOEL	337
0009	KB9IUA	599 IL KEVIN	384
0010	N9AW	599 WI JERRY	1271
0010	K5ZTY	559 TX BILL	473
0011	WD8KQY	599 OH GARY	446
0012	K5VUU	559 TX ED	1343

0013	N0DT	559 MO DAN	1004
0014	NV4V	579 KY PETE	1721
0015	K0PC	599 MN PAT	1964
0016	K5AAR	559 OK DON	1512
0018	N8IE	559 OH DAN	1404
0019	N5TW	599 TX TOM	1474
0020	KK5LD	559 TX DAN	2052
0021	KC1FB	559 CT JIM	29
0023	K0YWD	559 MT SKIP	2003
0024	AB7CE	559 MT ROY	1494
0025	AF4PS	559 FL MAC	704
0026	N8VAR	559 OH RON	263
0027	N1TP	559 FL TOM	1317
0028	W1FB	599 CT ED	2222
0030	W0RW	559 CO PAUL	284
0031	K5OI	559 NM TIM	73
0033	KB7WW	559 OR ART	290
0034	K10J	559 TX OJ	732
0035	W2XN	549 FL FRED	1728
0036	AF5Z	579 TX BOB	984
0037	KJ5SP	559 OK MEL	1287
0039	W7ELW	559 AZ HOWARD	2010
0040	NQ7X	559 AZ FLOYD	343
0041	W2PFS	559 NY HAL	2078
0042	KQ5U	559 TX TERRY	1603
0043	N5IW	549 TX DAVE	1718
0044	N5EN	559 TX STEVE	2071
0045	N1LN	559 TX BRUCE	2049
0048	AE2T	559 NY AL	1664
0048	W0JOE	559 MO JOE	1901
0049	W5SB	559 TX BILL	1279
0050	K5UP	559 OK GLEN	21
0052	WE6W	579 CA ED	1068
0053	N7RR	559 WA BRUCE	1688
0055	VE3JC	599 ON JOHN	744
0056	AB8DF	559 MI ED	1444
0057	VE6EWM	579 AB EARL	1076
0059	VA7NT	559 BC PAUL	20
0101	KU4AF	599 NC JOHN	987
0103	KI0II/M	559 CO RON	928
0104	AF4PP	559 GA CHUCK	1785
0106	NK7M	579 AZ BOB	271
0107	NT1R	559 ME BILL	912
0108	N5IB	559 LA JIM	1913
0109	K2UD	559 NY HOWARD	1535
0113	K7TQ	549 ID RANDY	102
0115	W9UQB	449 AZ MIKE	413
0118	AB0G0	599 CO DAVE	785

0118	N5UW	579	OK	CLIF	479
0022	N3YSI	559	PA	PAUL	1835
0124	K4LL	569	KY	LEN	5W
0125	WW7Y	559	UT	STEVE	94
0126	N5GJQ	559	LA	MIKE	5W
0128	KB7WW	559	OR	ART	290
0131	K8CV	559	MI	WALT	935
0136	K5DW	559	TX	DON	2083
0138	KI0G	559	CO	BOB	923
0143	K5JHP	559	TX	BILL	825
0146	W5TB	599	TX	DOC	673
0147	VE1MT	599	NS	LAYTON	1448
0150	KK5NA	559	TX	JOE	86
0153	NW7DX	559	WA	BEN	1892

72's Jim N0UR

Date: Mon, 06 Mar 2000 12:35:56 -0700
 From: Bruce Grubbs N7CEE <n7cee@arrl.net>
 To: jennings@eng14.rochny.uspra.abb.com, "Low Power Amateur Radio Discussion"
 <qrp-l@Lehigh.EDU>
 Subject: [65050] Re: qprttf: When is it this year...
 Message-ID: <3.0.5.32.20000306123556.009aba50@earthlink.net>
 Mime-Version: 1.0
 Content-Type: text/plain; charset="us-ascii"

At 11:08 3/6/2000 -0500, Thomas Jennings wrote:
 >Hi guys,
 >I was wondering when qprttf is this year.
 >Anybody know??
 >I need to make some travel plans...
 >
 >tu es 73,
 >
 >Tom, kv2x
 >
 Tom,
 According to my contest calendar, it's April 29 this year.
 73

Bruce N7CEE
 n7cee@arrl.net

Date: Mon, 6 Mar 2000 14:41:15 -0500
From: "Ted Roycraft" <roycraft@research.att.com>
To: <dandooley@pipeline.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [65051] RE: Clipperton
Message-ID: <NBBBJCDNMJMMLKHBCBIEEEJPDJAA.roycraft@research.att.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dan,
You can get a history of spots from
DX Summit (<http://oh2w.kolumbus.com/dxs/qin.html>)
and it shows that, on 75 meters, F00AAA typically
listens on 3805KHz (sometimes simplex though).

73, Ted, W2ZK

> -----Original Message-----
> From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of
> Dan W. Dooley
> Sent: Monday, March 06, 2000 2:14 PM
> To: Low Power Amateur Radio Discussion
> Subject: OT: Clipperton
>
>
> Sorry for the Off Topic post.
>
> Does anyone know where Clipperton has been listening on 75 at night? Xmt.
> freq. is published at 3795.
>
> Tnx
>
> Dan W. Dooley WB5TKA Bedford, Texas EM12ku
> e-mail to: dandooley@pipeline.com
> May Goddes love blest ye alle
> SOC#198
> "Ancient Pistol, I do partly understand your meaning."
>
>

Date: Mon, 6 Mar 2000 15:25:16 -0500
From: hattonte@gdls.com

To: qrp-1@Lehigh.EDU
Subject: [65052] Re: Interesting question - origin of Vcc
Message-ID: <OFF6CD5242.1356D662-ON8525689A.00700295@gdls.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

For what it's worth (not much, I guess) I used to work with an engineer from northern Greece. Due to the regional dialect, he always referred to Vcc as Vshee-shee. It never really started much of a cult, though.

de Terry W1QF
soc #50

Date: Mon, 6 Mar 2000 15:40:54 -0500
From: hattonte@gdls.com
To: qrp-1@Lehigh.EDU
Subject: [65053] Re: CQ HW-7, 8, 9 event?
Message-ID: <OFDF1795F9.C9AC0E2D-ON8525689A.0071850A@gdls.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Pls put me on the list. Tnx.
Terry Hatton W1QF HW-8, stock unit, straight key.

Date: Mon, 06 Mar 2000 16:27:08 -0800
From: "E. Roswell" <eroswell@monmouth.com>
To: "Everhart, Joseph @ CSE" <jeverhar@mail.cse.1-3com.com>
Cc: "'n0rc@qsl.net'" <n0rc@qsl.net>, "'qrpl'" <qrp-1@lehigh.edu>, "'njqrp'" <njqrp@njqrp.org>
Subject: [65054] Re: Atlanticon SNAP questions
Message-ID: <38C44CDC.1472@monmouth.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Everhart, Joseph @ CSE wrote:

> Rod, you wrote, in part:
> >I having a small problem with my SNAP. The OSC doesn't always start.
> >.. If I touch the XTAL with my finger and apply power it starts fine
> >and run _IF_ I hold my finger on the XTAL can. Removing my finger
> >right away causes the circuit to behave as described above.

> I suspect that what you are seeing is an overtone response that is
> favored in this circuit. Commonly higher frequency crystals (24 MHz

My SNAP wasn't working right off, either. I substituted a different crystal & it fired up in 3rd overtone easily, which is right in line with what Joe said. After carefully checking L1, I found I grossly erred in the number of turns. Rewinding it to the required (higher) number of turns, with original crystal, it came right up on frequency. So, check the turn count on L1,...it is hard to count the 35 turns required on that little doughnut!

73, Ed,
K2MGM

Date: 6 Mar 00 21:52:36 America/Fort_Wayne
From: M Goins <mgoins@usa.net>
To: qrp-l@Lehigh.EDU
Subject: [65055] FS - OHR SCAF-1
Message-ID: <20000306215236.10673.qmail@aw161.netaddress.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

I recently purchase this OHR SCAF-1 right here and my wife picked up one =
for
me too. Needed only one to go with the Sierra. \$55 CONUS.

mike
wb5yjx =

Get free email and a permanent address at <http://www.amexmail.com/?A=3D1>

Date: Mon, 6 Mar 2000 13:54:44 -0800
From: "Barry L. Geipel AD6HR" <bgeipel@primenet.com>
To: <john@neknetwork.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [65056] Re: Fireball 40 amp problem
Message-ID: <005e01bf87b6\$95449280\$cbc9bbc0@cw1.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I had the same problem with mine. I tracked down two of the problems to poor

connections on the two transformers. A little resoldering cleaned that up.

The next problems with with the "other" side of the FB40. It was only putting out about 4mW instead of 40mW. I rewound all of the torroids and checked everything else and just could not get any more power out. So I looked at the schematic and decided to circumvent the voltage divider on the input. That gave me a clean 1.5 watts out.

I have not been able to figure out why my base FB40 only puts out 4mW. Any ideas????

73,

Barry - AD6HR

----- Original Message -----

From: <john@neknetwork.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Saturday, March 04, 2000 9:35 PM

Subject: Fireball 40 amp problem

> Hello All,

>

> I finished building the add-on amp for the Fireball 40, but it doesn't
> seem to be putting out much. I have basically nothing for test equipment
> besides a volt meter. Does anyone know where I can find some info on
> troubleshooting this? (and yes, I tried google :)). Thanks, 73,

>

> John, KB1ENS

> --

> John Wagner - john@neknetwork.com

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Date: Mon, 06 Mar 2000 16:58:20 -0500

From: Tom Isgro <k8cz@concentric.net>

To: RAWSONDM@cs.com

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [65057] Re: Dayton HamVention Help Please!

Message-ID: <38C429FC.9E058893@concentric.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Surprising! I thought that CVG was outrageous. It's about \$900 round trip from Cincinnati to Chicago. I can drive there in 7 hours.

--

72, 73 oo's

Tom K8CZ Hamilton, OH

FPqrp #--41, QRP-1 945, FISTS 2360, NORCAL, QRP-ARCI, ARRL

Date: Mon, 6 Mar 2000 21:49:42 -0000
From: "Mel Evans" <mel@euramcom.freeserve.co.uk>
To: <kc8aon@juno.com>
Cc: <qrp-1@lehigh.edu>
Subject: [65058] Re: Heathkit HW-7,8, & 9 Users !
Message-ID: <000201bf87b7\$c4f7c3c0\$76c3883e@dsnqutvf>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have two HW9's, one assembled and ok with WARC bands, the other in the original box with inventory parts etc and with authentication as the last HW9 sold RETAIL by the agents here in the uk, Cedar Electronics. Other un-assembled kits are around and have been/are being sold second/more user, but this is the last company supplied one AFAIK

Regards

Mel

GM6JAG, Edinburgh Scotland

Home of the last HW9

-----Original Message-----

From: Rick McKee <kc8aon@juno.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: 05 March 2000 23:14
Subject: Heathkit HW-7,8, & 9 Users !

>Good to see that there are a few still on the air ! Here are the ones
>listed in the order that I recieved them. Also, Carel, PA0CMU in
>Holland, along with 4 or 5 other hams have reproduced the HW-8 circuit
>and homebrewed their rigs ! And would someone please tell Steve, AA5TB
>where his long lost, sold at a sidewalk sale HW-8 is ! It has his old
>call inscribed on the inside of the top cover - KA5DUU, shame shame Steve
>- only kidding.

>
>1 Howard, K2UD - HW-7, 8, & 9
>2 Rick, KC8AON - HW-7 & 8
>3 Joe, KK5NA - HW-7, 8, & 9
>4 Nick, K3NY - HW-8
>5 Donald, W4BWS - HW-8
>6 Martin, N1PGP - HW-8
>7 Scott, W4PJ - HW-8
>8 Tom, WB5QYT - HW-8
>9 Brian, WD0HGB - HW-7
>10 Jim, N5IB - HW-7
>11 Jerry, W8GND - HW-8
>12 Pablo, WP4JXD - HW-8
>13 Walt, N9MZP - HW-9
>14 Thomas, AC7A - HW-8
>15 Thaire, W2APF - HW-7 & 8
>16 Don, KK7VM - HW-8
>17 Robert, KC2JZ - HW-8
>
>-----
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><http://dl.www.juno.com/get/tagj>.
>

Date: Mon, 06 Mar 2000 17:09:04 -0500
From: Tom Isgro <k8cz@concentric.net>
To: w1rfi@arrl.org
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [65059] Re: March QST
Message-ID: <38C42C80.BDC7B882@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"Hare, Ed, W1RFI" wrote:

> > My vote goes to Lew Smith for his 10-meter QRP
> > transmitter.
>

Yep! that was mine as well.

--

72, 73 oo's

Tom K8CZ Hamilton, OH

FPqrp #-41, QRP-1 945, FISTS 2360, NORCAL, QRP-ARCI, ARRL

Date: Mon, 6 Mar 2000 17:37:53 -0500

From: "George Heron N2APB" <n2apb@erols.com>

To: "NJQRP" <NJQRP@njqrp.org>, <bgeipel@primenet.com>, "QRP-L" <qrp-l@lehigh.edu>

Subject: [65060] Re: Fireball 40 amp problem

Message-ID: <006801bf87bc\$af820b40\$e6ca9cce@ire.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Glad you got your FB40 Amp working Barry. It's a gem of a little circuit and can be applied directly as-is to *many* QRP projects (TT2, SMK-1, PIXIE, KnightSMiTE, etc.) to get 1.5W output.

Regarding your question of why low power output from the base FB40 .. there can be many reasons. The short answer is that you might see some stronger 'LS74 chips than others, and you could use 'AC74 chips for more power too. The output should be terminated in 50-ohms to get proper measurements, and perhaps better caps in the output LPF (low pass filter) would help. Power output from the stock FB40 tends to average in the 25-35mW range, with some ending up on the high end, while others are one the low end. And remember that you can utilize the pcb circuit traces for the integral/optional RF amplifier to give you about 1.5W output, even with a low-ended 4 mW signal from the transmitter side of the board.

Here's a re-post of some "FB40 Application Notes" we did a while ago. There was some previous discussion about only being able to get low-mW levels from the stock FB40, and we collected most of the suggestions into one posting. Please let me know by email if you have any questions concerning this. Here you go! ...

73, George N2APB

n2apb@amsat.org

=====

FB40 Application Notes

=====

There have been real good responses from everyone building their "Jersey Fireball 40 QRP Transmitters" (or FB40 for short) ... rigs are getting built on different bands, skeds are being attempted, etc. Our club elmers have been busy with responses to the various technical questions being posed

on the lists lately. Here's a collection of notes that might help all you Fireballers:

1) LOW POWER & DC DECOUPLING -- In the original 'rev A' FB40 kit, there is no dc decoupling for the oscillator or 74LS74 TTL divider chips to the output filter and antenna. This means that there is an average 2.5 volt dc signal connected between antenna and ground through the output filter. With simple dipoles or other antennas with no dc continuity this is not immediately a problem. But if folks use antennas with dc connections (like many multiband verticals) or a link-coupled tuner, the oscillator or divider section selected will see a dc short circuit. We doubt that there will be any damage, but the harmonic content may suffer or the chip may not produce the correct output. A simple fix would be to replace the BAND selection jumper with a 0.1 uF disc capacitor. With the optional amplifier in line there *is* dc isolation so this is not an issue. 'Rev B' of the kit includes a coupling cap for the band selection, thus eliminating this problem.

2) OUTPUT FILTER VALUES -- Some builders have questioned how we obtained the output filter component values for operation on the different bands. The computer program used is one called "L.exe - Low Pass / High Pass Filters, version 1.50", a Wes Hayward program supplied by the ARRL. This is a neat program that automates one of the standard filter calculations in the Handbook to provide all sorts of filters with varying parameters: Butterworth, Chebyshev, Elliptical, variable number of elements, cut-off frequencies, and maximum ripple values. In each case, we chose a 5-element Chebyshev low pass filter with 50-ohm input and output impedance, with 1 dB maximum ripple, and a cut-off frequency at the next higher megahertz value from where we were operating. [e.g., a cut-off frequency of 4 MHz was selected for the 80m filter, etc.] Shown below is a complete listing of the component values for each of the bands. (Note: We had forgotten to list the 20m and 160m band components in the manual. And view the table with a proportional font like Courier to have the columns line up.)

	C4	L1	C6	L2	C5
160m	3400pF	4.3uH	4770pF	4.3uH	3397pF
80m	1700pF	2.2uH	2400pF	2.2uH	1700pF
40m	820pF	1.1uH	1000pF	1.1uH	820pF
20m	450pF	0.6uH	630pF	0.6uH	450pF
10m	230pF	0.3uH	330pF	0.3uH	230pF

4) FILTER CAP QUALITY AT 20m & 10m -- You might need better quality capacitors when attempting to build your output filters for the higher frequencies. At 14 MHz and 28 MHz, the inexpensive disc capacitors are quite lossy and results in a low Q filter. Try using some silver mica caps (or equivalent) and your output power at the higher frequencies might improve.

5) OUTPUT FILTER TYPE -- For the purists among us ... the manual states in a couple of places that the output filter is an "elliptical filter". We

originally used this kind of filter in our prototypes but later found just as good results using a 5-element low pass filter. Thus we were able to do away with the extra capacitors in parallel with the inductors (which is the characteristic configuration for an elliptical filter).

6) TOROIDS -- Some questions had come up as to the turns calculation for the L1 and L2 inductors used in the output filter. The equation used in the manual is the standard one for determining the required number of turns around a specific type of toroid core:

$$N = 100 * \text{SQRT} (L_{\text{desired}} / AL)$$

This equation is stated in an excellent reference book: "The Electronic Data Book for Homebrewers and QRPers", by Paul Harden, NA5N (ISBN 0-913945-57-9), as well as in the ARRL Handbook (my 1996 version has it on page 6.25 ... check the index for "toroid" in other versions).

In order to accommodate the greatly varying core permeabilities at different frequencies of use, each core has an inductance index, or "AL". Thus looking up the T37-2 core used in the FB40, you'll find its AL = 40 uH per 100 turns. So if we wanted the 1.1uH value for our filter inductor, the equation computes to:

$$N = 100 * \text{SQRT} (1.1 / 40) = 16.58$$

And since we can't have fractional windings with toroidal inductors, we rounded this to 16 Turns. Close enough!

7) YET MORE POWER -- One of the builders notes that by using "Advanced CMOS" TTL devices instead of the "Low-power Schottky" ones we used for U2 and U3 (74LS74), we could get effective power transfer from the chips. The AC devices provide an output impedance much closer to the 50-ohms that the output filter was designed for, thus providing a better match and more power to the antenna. If we can find these AC devices at a reasonable price, we may try using them in 'rev C' of the FB40 project.

Another recommendation: hopefully when power is measured you are terminating the antenna connection with a 50-ohm resistor. It's important, as the output impedance of the LPF was designed to be 50-ohms. Plop the resistor on (without an antenna), measure the voltage with a scope (or perhaps even a DVM at this frequency?), note the voltage and do the arithmetic. ($P=V^2/R$) Don't forget about peak vs. peak-to-peak, and rms values, etc. This should get you accurate power readings.

Another aspect to consider (forgot when/where I wrote this) is that the oscillator can itself will put out about 40mW with the jumper set for the 10m position. This way you get all the energy from the can pumped into the LPF and out the antenna. And you can increase the supply voltage to the can up to about 6V (disconnect the TTL chips and the 78L05 regulator when doing this.)

8) 160M OPERATION -- An alert builder spotted another capability of the

FB40: 160m operation! In the interest of time and board space, we decided not to use the second flip-flop gate in U3. If it were connected as in U2b, you could bring the 80m signal out to the unused 5th BAND jumper pads and get your 160m signal out! Note that the 160m filter component values are provided in the table above. Also, note that you'll have to use a higher oscillator frequency (e.g., above 28.800 MHz) in order to operate with the 160m amateur band when it's divided in half 4 times!

----- Original Message -----

I had the same problem with mine. I tracked down two of the problems to poor connections on the two transformers. A little resoldering cleaned that up.

The next problems with with the "other" side of the FB40. It was only putting aout about 4mW instead of 40mW.

[snip]

Date: Sun, 5 Mar 2000 22:13:00 EST
From: Rick McKee <kc8aon@juno.com>
To: qrp-1@Lehigh.EDU
Subject: [65061] New Updated list of "Hot Water Wonders" HW series users
Message-ID: <20000306.173406.4567.1.kc8aon@juno.com>

Wow ! It just keeps adding up, think I'll add "Hot Water Wonder # 2" to my QSL's ! I'm not a contester, but someone mentioned a QRP party with multipliers for working to/from the different HW series. If someone is willing to kick it off, go for it ! I might just make a few Q's with my HW-7 & 8 !

72.....kc8aon

1 Howard, K2UD - HW-7, 8, & 92 Rick, KC8AON - HW-7 & 83 Joe, KK5NA -
HW-7, 8, & 94 Nick, K3NY - HW-85 Donald, W4BWS - HW-86 Martin, N1PGP -
HW-87 Scott, W4PJ - HW-88 Tom, WB5QYT - HW-89 Brian, WD0HGB - HW-710
Jim, N5IB - HW-711 Jerry, W8GND - HW-812 Pablo, WP4JXD - HW-813 Walt,
N9MZP - HW-914 Thomas, AC7A - HW-815 Thaire, W2APF - HW-7 & 816 Don,
KK7VM - HW-817 Robert, KC2JZ - HW-818 David, N9UXU - HW-819 Rick,
WB6JBM/8 - HW-820 Bruce, KS4V - HW-9
21 Jim, WD4OJY - HW-9
22 Patrick, KD4OBQ - HW-7
23 Steve, K4JPN - HW-8
24 Howard, W7ILW - HW-9
25 San, K9YT - HW-7, 8, & 9
26 Curt, WB8YYY - HW-8

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End of QRP-L Digest 1752

